



BADGER STATE

SMOKE SIGNALS

For Radio Amateurs • By Radio Amateurs

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ARRL proposes simplified amateur license structure

The ARRL Board has agreed to propose a simplified Amateur Radio licensing structure with four classes. Lengthy discussion and debate during the Board's meeting July 16-18 led to majority support for a plan for four written examination elements to establish amateurs' operational and technical qualifications instead of the present five, and two Morse code examination elements instead of the present three.

Under the plan adopted by the Board, the entry level to Amateur Radio would be known as Class D and would convey the privileges of the present Technician license. The written examination would be at the same level of difficulty as that of the present Technician examination, but consistent with the privileges of the license. All amateurs now licensed as Technicians would become Class D.

The next step would be known as Class C and would convey the privileges of the present General license, but with phone subbands expanded by 50 kHz on 75 and 15 meters and by 25 kHz on 40 meters. Class C would be the entry level to high frequency (HF) operating privileges. To upgrade from Class D to Class C, an amateur would pass a written examination on the operational and technical qualifications required for HF operation and a 5 word per minute Morse code examination. All amateurs now licensed as General, Technician Plus, and Novice would become Class C. The expansion of the telephony sub-bands would result from "refarming" of the Novice CW bands that are no longer required for their original purpose.

The third step would be known as Class B and would convey the privileges of the present Advanced license, but with phone subbands expanded by 50 kHz on 75 and 15 meters and by 25 kHz on 40 meters. To upgrade from Class C to Class B, an amateur would pass a more advanced written examination similar in difficulty to the present Element 4A and a 12 word per minute Morse code examination. All amateurs now licensed as Advanced would become Class B.

The final step would be known as Class A and would convey the full privileges of the present Amateur Extra Class, with telephony sub-bands expanded by 50 kHz on 75 and 15 meters and by 25 kHz

on 40 meters. To upgrade from Class B to Class A, an amateur would be required to pass the most difficult written examination in the sequence. Consistent with the practice in many other countries, no additional Morse code examination would be required beyond 12 words per minute. All amateurs presently licensed as Amateur Extra Class would become Class A.

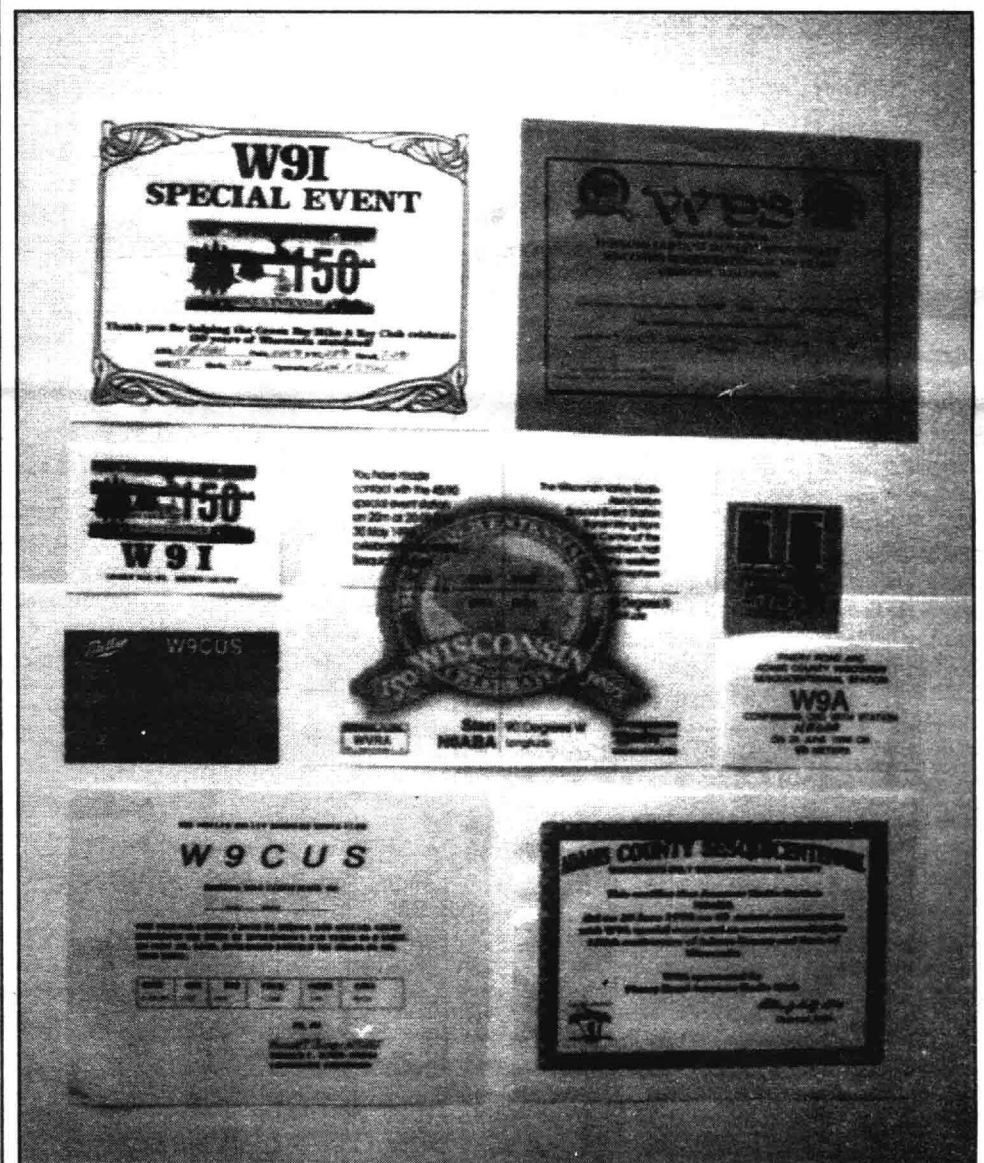
In their discussions, Board members emphasized that the objective is to rationalize and simplify the amateur licensing structure without reducing the requirements for any class of license. Where reductions in Morse code requirements are proposed, there would be a corresponding increase in written examination standards. On the other hand, Board members were adamant that simplifying the structure should not come at the expense of privileges already earned by amateurs. Therefore, present Novice and Technician Plus licensees, having earned entry-level HF operating privileges, would be granted the new entry-level HF license.

Adoption of the simplification plan marks the culmination of 30 months of work by the Board, during which time the input of literally thousands of ARRL members and other amateurs and prospective amateurs was considered. The Board debated a wide variety of options including both smaller and larger numbers of license classes, higher and lower qualification levels, and different privileges. Nine of the 15 Directors voted in favor of the plan, with six opposed. Following the meeting ARRL President Rod Stafford, W6ROD, observed, "The debate was at times contentious and the result was not unanimous. Some Board members preferred greater simplification; others were uncomfortable with some of the changes being proposed. However, every Board member, without exception, left the meeting knowing that each of his or her colleagues did what they believe is best for the future of Amateur Radio."

Members are urged to contact their ARRL directors to comment on this proposal. E-mail addresses are on page 10 of any issue of QST. Members also may comment on the proposal via the ARRL Web site, <http://www.arrl.org> or via e-mail at restrux@arrl.org.

- ARRL

Stan works all Wisconsin Sesquicentennial special event stations - and more!



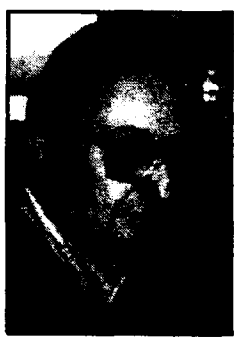
Read about how Stan, NØABA, in Kansas, worked all six Wisconsin sesquicentennial stations BSSS knew about - and found and worked two more! It's all on page 9.

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WHAT'S HAPPENING

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Edited by Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901 • kebner@palacenet.net

Swapfests and Other Social Events

SUNDAY, AUGUST 2, 1998. The Marshfield Area Radio Society will be holding their 7th annual picnic in the park, Hamnic potluck dinner and swapfest at Wildwood Park. Gather around 11:00 a.m. Bring a dish to pass. Contact: Christopher Strong, KB9NMH OR Guy Boucher, 107 West Third Street, Marshfield WI 54449. (715) 384. 4323. Via packet radio to KF9XXX@W9IHW.E5.AI.WI.USA.NA or e-mail guyboucher@tzn.net.com

SUNDAY, AUGUST 2, 1998. Hamfesters Hamfest, Will County Fairgrounds, Peotone, IL. Contact: David F. Brasel, NF9N, 6933 W. 110 Street, Worth, IL 60482. (708) 44-0580. Amateur Radio Info Line (708) 535 AHAM.

SATURDAY, AUGUST 8, 1998. Circus City Swapfest, Sauk County Fairgrounds, Baraboo WI. Contact: Steve Schulze, N9UDO, (608) 356-2313/356-4777 or Bill Klinkner, N9KXX, (608) 643-6908/643-6453. <http://www.thelorax.com/~ssschulze/hamfest.htm>

SATURDAY, AUGUST 8, 1998. International Order of bOzOs 2nd Hamradio and Computer Fest, at Tommy's Village Laries, Hwy 57, North, Hilbert, WI. Contact: Mike Ortlieb, KN9P, W2104 Crosstown Rd., Hilbert, WI 54129. (920) 853-7073.

SATURDAY & SUNDAY, SEPTEMBER 19 & 20, 1998. Peoria Area ARC SUPERFEST, Exposition Gardens, Peoria IL. Contact: Superfest '98, P.O. Box 3508, Peoria IL 61616-3508.

SATURDAY & SUNDAY, SEPTEMBER 26 & 27. RADIO EXPO 98, Lake County Fairgrounds Rts. 45 & 120, Grayslake, IL. Contact: Chicago FM Club, PO Box 56724, Harwood Hts, IL. 560656-0724. (708) 457-0966. <http://www.chicagofmclub.org>

SUNDAY, NOVEMBER 8, 1998. Fox Cities Hamfest, Starlite Club, Hwy. 55 & County JJ North of Kaukauna, WI. Vendor setup 6:00 a.m. Doors open 8:00 a.m. Contact: Chad Pennings, N9PRC, 1912 Russett Ct., Apt. 7, Appleton, WI 54914. (920) 993-0485.

Badger State Smoke Signals

*Amateur Radio
Education and Information*

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Subscriptions

1 year	(12 issues)	\$13.95
2 years	(24 issues - save \$1.95)	\$25.95
3 years	(36 issues - save \$3.90)	\$37.95

Subscription form is on page 5. Special club package reduced rates are available. For information, contact Ken Ebner, K9EN.

When to Send It

The closing date for each issue is the first of the month for the next month's issue. For example, the closing date for the June issue is May 1. The only exception is for participating clubs' minutes. Participating clubs are requested to send their material no later than FIVE DAYS after the club's meeting. For example, if a club meets on the 4th of the month, the material should be sent no later than

SATURDAY, JANUARY 9, 1999. West Allis Radio Amateur Club, 27th annual Midwinter Swapfest, Waukesha County Expo Center Forum, Waukesha, WI. Contact: WARAC, PO Box 1072, Milwaukee, WI 53201-1072.

TUESDAY, FEBRUARY 23, 1999. Red Cedar Repeater Association Auction, American Legion Post 53, 634 Water Street, Eau Claire, WI. Contact: Steve Hart, KA9OMC, E616 810th Ave., Knapp, WI 54749. (715) 665-2374.

SUNDAY, APRIL 11, 1999. MARA Swapfest, Madison, WI. Middleton Conference Center. (Same place as last year, but new name.) Contact: MARA, PO Box 8890, Madison, WI 53708-8890.

SATURDAY, JULY 10, 1999. South Milwaukee Amateur Radio Club Swapfest, American Legion Park, Shepard Avenue, South Milwaukee, WI. Contact South Milwaukee ARC, P.O. Box 102, South Milwaukee, WI 53172. (414) 762-3235.

See also the back page and flyer ads for additional information on many of these events.

Let us know of your dates as soon as you know them. We will list them and perhaps help avoid conflicts with other events.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas. Send information on your event to Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages. For information on rates and requirements for our advertising pages, please contact K9ZZ or K9EN.



CLUB MEETINGS

Due to space limitations, we cannot always carry the full listing of Wisconsin and area club meetings. Please see the March 1998 meetings column for the latest complete listing. No changes have been reported to BSSS since that listing.

the 9th of that month. This material is to be sent to the Editor.

Where to Send It

Address changes and corrections, and exchange papers should be sent to Ken Ebner.

Editorial material, photographs, and feature articles should be sent to Jim Romelfanger.

Inquiries about advertising should be directed to Ken Ebner.

Club, swapfest, and Test Point information should be sent to Ken Ebner.

Swapfest ADS should be sent to Jim Romelfanger NO LATER THAN EIGHT WEEKS BEFORE THE EVENT'S DATE.

Subscriptions should be sent, with check or money order, to Ken Ebner.

Conditions for Reprinting or BBS Posting Material from Badger State Smoke Signals

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This newspaper is produced by volunteer radio amateurs, and is non-profit. This newspaper is mailed from Portage, WI 53901.

Badger State Smoke Signals is incorporated as a Wisconsin non-stock, non-for-profit organization.

Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other individual or organization.

The Test Point



*Amateur Radio Examination Locations
and Schedules in the Wisconsin Area*

August 01, 1998	Oshkosh (Omro), WI
August 01, 1998	St. Paul, MN
August 08, 1998	Blaine, MN
August 08, 1998	Madison, WI
August 08, 1998	Oak Creek, WI (MRAC)
August 13, 1998	Apple Valley, MN
August 15, 1998	Cottage Grove, MN
August 15, 1998	Loves Park, IL
August 15, 1998	Redgranite, WI
August 18, 1998	Eden Prairie, MN
August 22, 1998	Bloomington, MN
August 29, 1998	Milwaukee, WI (MRAC)
August 29, 1998	Tomahawk, WI
September 05, 1998	Oshkosh (Omro), WI
September 05, 1998	Racine, WI
September 05, 1998	St. Paul, MN
September 10, 1998	Apple Valley, MN
September 12, 1998	Blaine, MN
September 12, 1998	Madison, WI
September 12, 1998	Oak Creek, WI (MRAC)
September 12, 1998	Onalaska, WI
September 12, 1998	Sheboygan, WI
September 15, 1998	Eden Prairie, MN
September 19, 1998	Appleton, WI
September 19, 1998	Cottage Grove, MN
September 19, 1998	Loves Park, IL
September 19, 1998	Milwaukee, WI (BE)
September 26, 1998	Bloomington, MN
September 26, 1998	Milwaukee, WI (MRAC)
September 26, 1998	Tomahawk, WI
October 03, 1998	Oshkosh (Omro), WI
October 03, 1998	Racine, WI
October 03, 1998	St. Paul, MN
October 03, 1998	Pewaukee WI
October 08, 1998	Apple Valley, MN
October 10, 1998	Blaine, MN
October 10, 1998	Eau Claire, WI
October 10, 1998	Madison, WI
October 10, 1998	Oak Creek, WI (MRAC)
October 17, 1998	Cottage Grove, MN
October 17, 1998	Loves Park, IL
October 17, 1998	Milwaukee, WI (BE)
October 17, 1998	Redgranite, WI
October 20, 1998	Eden Prairie, MN
October 24, 1998	Bloomington, MN
October 31, 1998	Milwaukee, WI (MRAC)
October 31, 1998	Tomahawk, WI
November 01, 1998	Kaukauna, WI
November 07, 1998	Menomonie, WI
November 07, 1998	Onalaska, WI
November 07, 1998	Oshkosh (Omro), WI
November 07, 1998	Racine, WI
November 07, 1998	Pewaukee WI
November 07, 1998	St. Paul, MN
November 12, 1998	Apple Valley, MN
November 14, 1998	Blaine, MN
November 14, 1998	Madison, WI
November 14, 1998	Oak Creek, WI (MRAC)
November 17, 1998	Eden Prairie, MN
November 18, 1998	Sheboygan, WI
November 21, 1998	Cottage Grove, MN
November 21, 1998	Loves Park, IL
November 21, 1998	Milwaukee, WI (BE)
November 28, 1998	Bloomington, MN
November 28, 1998	Milwaukee, WI (MRAC)
November 28, 1998	Tomahawk, WI
December 05, 1998	Oshkosh (Omro), WI
December 05, 1998	Racine, WI
December 05, 1998	Pewaukee WI
December 05, 1998	St. Paul, MN
December 10, 1998	Apple Valley, MN

December 12, 1998 Blaine, MN
 December 12, 1998 Madison, WI
 December 12, 1998 Oak Creek, WI (MRAC)
 December 15, 1998 Eden Prairie, MN
 December 19, 1998 Cottage Grove, MN
 December 19, 1998 Loves Park, IL
 December 19, 1998 Milwaukee, WI (BE)
 December 19, 1998 Milwaukee, WI (BE)
 December 19, 1998 Redgranite, WI
 December 26, 1998 Bloomington, MN
 January 23, 1999 Appleton, WI
 January 16, 1999 Milwaukee, WI (BE)
 February 20, 1999 Milwaukee, WI (BE)
 March 20, 1999 Milwaukee, WI (BE)
 April 15, 1999 Milwaukee, WI (BE)

Monthly, 1st Sat. Racine, WI
 (except January, July & August)
 Monthly, 1st Sat. Oshkosh (Omro), WI
 Monthly, 1st Sat. St. Paul, MN
 Monthly, 2nd Thu. Apple Valley, MN
 Monthly, 2nd Sat. Oak Creek, WI (MRAC)
 Monthly, 2nd Sat. Madison, WI
 Monthly, 2nd Sat. Blaine, MN
 Monthly, 3rd Tue. Eden Prairie, MN
 Monthly, 3rd Sat. Milwaukee, WI (BE)
 Monthly, 3rd Sat. Loves Park, IL
 Monthly, 3rd Sat. Cottage Grove, MN
 Monthly, 4th Sat. Bloomington, MN
 Monthly, Last Sat. Milwaukee, WI (MRAC)
 (except December)
 Monthly, Last Sat. Tomahawk, WI
 (January thru October only)
 Quarterly Eau Claire, WI
 (Second Saturday Jan., Apr., & Oct.)

plus annual summer hamfest.)

Many Swapfests/Hamfests offer exam sessions. If not shown above contact the sponsoring club in the Swapfest column on page 2.

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Some examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL. Send a 32¢ SASE if you request one from the ARRL. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$6.35 payable to "ARRL/VEC".

The FCC now requires applicants to show their ORIGINAL AMATEUR LICENSE or CSCE to the VEC. You must also have two good copies of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 610 and most VEC want a copy for their records. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

For those with internet access, a listing of exam sessions is available from:

<http://www.arrl.org/arrlvec/examsearch.shtml>

By checking this page, a person can find out registered VE sessions anywhere in US and some overseas. You can search by country, state or zip code. The listing is not specific to any particular VEC, it is a master database. (Thanks to KB9EQI for information.)

MILWAUKEE RADIO AMATEURS' CLUB
 (MRAC/VEC)
 SECOND SATURDAY - OAK CREEK, WI
 LAST SATURDAY - MILWAUKEE, WI

SECOND SATURDAY DATE: 1:00 p.m. to 3:00 p.m. at Wauwatosa Savings Bank, 6560 S. 27th St., Oak Creek, WI.

LAST SATURDAY DATES: (except December): 9:00 a.m. to 12:00 noon at Amateur Electronic Supply (AES), 5710 W. Good Hope Rd., Milwaukee, WI. Note: For Additional Information: Call (414) 466-HAMS (Answering Machine).

Bring along your ORIGINAL license, CSCE (if any) and one (1) good quality photocopy of each, plus two forms of identification, such a driver's license, etc. Also required is \$6.35 for the exam fee. WALK-INS are welcome. To register in advance, use a post card: Print the grade of license you are applying for, your name, address, and telephone number. Send the card to MRAC/VEC, Milwaukee Radio Amateurs Club, PO Box 25707, Milwaukee, WI 53225.

BADGER EXAMINERS (BE) MILWAUKEE

Badger Examiners group tests at AES (Amateur Electronic Supply) at 60th and Good Hope, every third Saturday MORNING. Exam times are 9:30 a.m. to 12:00 noon, at the old Sierman

Printing shop, just 300 feet west of the AES store. Novice to Extra are offered, and all test materials are provided. Fee is \$6.35. and bring your original license, or CSCE if needed. Also available are Commercial license exams GROL (General Radiotelephone license), GMDSS, Telegraph, Etc. Fee is \$35.00. For more information call Gary Sharbuno, WI9M at (414) 355-0237.

MADISON, WI

VE exams are held in Madison every second Saturday morning of the month at 8 a.m. They are held at the operations building of the Madison Metropolitan Sewerage District at 1610 Moorland Rd. To get there take the Beltline (Hwy 12 & 18) to South Towne Drive. Go south 8/10 mile till South Towne Drive makes a bend and becomes Moorland Rd. and enter at gate.

You should bring a picture ID, your original licence and a copy of your licence. For exams beyond the novice tests, bring a check for \$6.35, made out to the ARRL/VEC. If the special 610 form with the medical exemption is required, contact me beforehand to obtain one. No appointments are necessary to take exams. For further questions, please leave a message on the mailbox or phone me at (608) 832-6631.

Mark Jenks, NZ9B

RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August. Monthly exams are given 9:00 to 11:00 a.m. at the Red Cross Building, 4521 Taylor Avenue, Racine. Walk-ins are permitted.

Talk in on 147.87/.27. Inquiries and registrations should be directed to Robert N. Jensen, W0WLN, 5616 Cambridge lane #6, Racine, WI. Telephone (414) 886-8551.

TOMAHAWK, WI

Last Saturday of every month. Jan. thru Oct.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No preregistration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Terry Collins, KB9AUP, W6564 Highway 8, Tomahawk, WI 54487. Telephone (715) 453-4633.

APPLETON, WI - ARRL/VEC

MANITOWOC, WI (HAMFEST)

KAUKAUNA, WI (HAMFEST)

Conducted by the Fox Cities ARC VE team. All test sessions in Appleton are held at James Madison Jr. High, 2020 S. Carpenter Street. Testing starting at 8 a.m. For Appleton information, contact George R. Croy, W9MDP, 2113 Twin Willows Drive, Appleton, WI 54914. (920) 730-0967. For Manitowoc or Kaukauna information, contact Larry Siebers, KD9IA (920) 759-1167.

OSHKOSH (OMRO)

The Oshkosh VE Team will administer Amateur Radio exams monthly on the first Saturday. Registration begins at 8:30 a.m. and exams will be given from 9 a.m. until noon at the Omro Community Center, 130 W. Larrabee, Omro, WI. Walk-ins welcomed. Bring a good quality photocopy of your original license and any other necessary documents such as a CSCE, etc. The first session will be through W5YI/VEC, and then sessions will alternate between ARRL/VEC and W5YI/VEC. The exam fee is \$6.35. For more information, please call Dick Lemme, K9FA, at (920) 235-0987, e-mail lemme@vbe.com, or write Dick at 826 Jefferson Street, Oshkosh, WI 54901.

EAU CLAIRE

The Eau Claire ARC will hold exam sessions on the second Saturday in the months of January, April, and October, as well as on the date of their annual hamfest during the summer. For further information contact: Carl F. Searing, W9NW, 1129 Mc Kinley Road, Eau Claire, WI 54703-2219. (715) 834-1303.

REDGRANITE, WI (W5YI VEC)

The Radio Amateurs of Wisconsin (RAW) will be holding test sessions at the Civic Center in Redgranite, 202 Pine River Road, one block from Highway 21. Turn north by Mosier's Sporting Goods store. Registration at 9:00 a.m. Bring two forms of identification, \$6.35 per test, two copies of all original documents, CSCE's, Licenses, etc. along with original documents. For further information, contact: Mark Miller, N9WT, (920) 231-1662 or Mike O'Connor, K9II (920) 231-7093.

SHEBOYGAN, WI

Wednesday dates: Registration 1830 hrs, testing 1900 hrs.
 Saturday dates: Registration 0830 hrs, testing 0900 hrs.
 Testing site is: Red Cross/Boy Scout Office Building (lower level), 2032 Erie Ave., Sheboygan, WI.

Test site has limited handicap accessibility. Walk-ins are OK but preregistration would be appreciated. Test fee is \$6.35. Make checks payable to SCARC VE Testing. All class tests administered. Contact: Art Pahr, K9XI (920) 876-7370 e-mail <k9xi@excel.net>

ONALASKA, WI (ARRL/VEC)

The Riverland Amateur Radio Club will hold test sessions at the Onalaska Public Library, 741 Oak Avenue South. registration begins at 9:0 a.m. with testing at 9:15 a.m. Please bring two forms of identification and two copies of all original documents. CSCEs, license, etc. For more information contact: Roger Reader, KA9BKK, 526 13th Ave. N., Onalaska, WI 54650. (608) 783-0732.

MEDFORD, WI (ARRL/VEC)

Taylor County Area AREC. Registration starts 8:30 a.m., testing starts 9:00 a.m. Location: The conference room in the lower level of the Sheriff's annex to the Taylor County Courthouse, corner of 2nd and Ogden Sts., Medford, WI. Take Ogden St. west on or Hwy. 13 to the courthouse. Park in the lots on the east or

south sides of the courthouse or on the street. PLEASE use the entrance on the south side of the courthouse and watch of the signs. Walk-ins welcome. Contact: Tom Hrdina, N9GEN, 2373 Willow Ave., Medford, WI 54451. (715) 748-4054

PEWAUKEE, WI

With the summer break and Labor Day, we won't be able to start exams again until October. The dates are: October 3, November 7, and December 5, 1998. The location is a little more handicap accessible, room S110 in the back of the science building by the handicap parking entrance. WCTC is on Hwy JJ off Hwy 16 from the East I-94 and Hwy T from West I-94 just north of GE Medical Systems. Tests start at 9:00 AM and registration ends at 10:00 AM. Contact: Al Johnson, AA7CS

CEDARBURG, WI - ORC HAMFEST

EAU CLAIRE, WI - ECARC HAMFEST

GREEN BAY, WI - ARES HAMFEST

HAYWARD, WI - HAYWARD HAMFEST

KAUKAUNA, WI - SWAPFEST

MANITOWOC, WI, LAKESHORE HAMFEST

OAK CREEK, WI - SMARC HAMFEST

RACINE, WI - RACINE HAMFEST

RHINELANDER, WI - NWARC SWAPFEST

ROCKFORD, IL - RARC HAMFEST

ROTHSCHILD, WI - WVRA HAMFEST

SOUTH MILWAUKEE, WI - SMARC HAMFEST

STEVENS POINT, WI - CWRA SWAPFEST

WAUKESHA, WI - KMRA SWAPFEST

WAUKESHA, WI - MIDWINTER SWAPFEST

DUBUQUE, IA - HAMFEST

See the Swapfest column for additional information and contact persons.

DUBUQUE, IA - ARRL/VEC

Dubuque Hamfest. Contact: Carl Clark, N0KAX, 2145 Delicia Drive, Dubuque, IA 52001. (319) 557-9149.

LOVES PARK, IL

Third Saturday of every month. Northern Illinois Volunteer Examiners (W5YI VEC). Held at North Suburban District Library, 6340 North Second St. 9:00 a.m. to noon. No new applicants after 11:00 a.m. Walk-ins welcome. (Hwy. 251), Loves Park, IL. Contact: Rusty Cordell, WB9QYV, 1823 Hulin St., Rockford, IL 61102-2619. (815) 968-0080. e-mail wb9qyv@aol.com

MINNESOTA TEST INFORMATION

From "The Ground Wave", Saint Paul Radio Club.

Saint Paul Radio Club (SPRC)

Contact: Ed VanCleave, W0VC, (612) 636-0108

Test Site: St. Paul Technical College

235 Marshall Ave.

St Paul, MN

TESTING: First Saturday of the month, 8:30 a.m.

Anoka Amateur Radio Club (AARC)

Contact: Craig Johnson, AA0ZZ (612) 483-3143

Test Site: Blaine City Hall

9150 Central Ave NE

Blaine, MN

TESTING: Second Saturday of the month, 9:00 a.m.

Bloomington Office of Emergency Management (Bloomington Amateur Radio Club (BARC))

Contact: Dan Royer, KE0OR (612) 888-9756

Test Site: Fire Station No. 1

94th St. & Nicollet Avenue S.

Bloomington, MN

TESTING: Fourth Saturday of the month, 9:00 a.m.

Valley Amateur Radio Club (VARC)

Contact: Bill Martin, AI0D (612) 432-0438

Test Site: Hayes Community Center

14601 Hayes Road

Apple Valley, MN

TESTING: Second Thursday of the month 7:00 p.m.

W5YI Group

Contact: Dave Ranney, N0AXL (612) 542-2553

Test Site: Eden Prairie Library

479 Eden Prairie Drive

Eden Prairie, MN

TESTING: Third Tuesday of the month 6:30 p.m.

SE Metro Area Radio Club (SEMARC)

Contact: Dave Harrell, K0RTF (612) 459-8678

Test Site: Cottage Grove fire Station

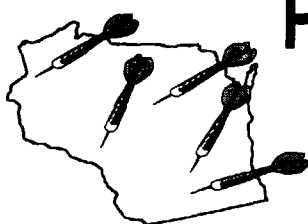
8641 80th ST., S

Cottage Grove, MN

TESTING: Third Saturday of the month, 9:00 a.m.

The times and places listed above are the usual time and place for each VE team. Occasionally, sessions are canceled or changed. It is a good idea to call ahead to confirm the test time and place

This section of Badger State Smoke Signals is available to provide you Volunteer Examiners Amateur Radio license examination schedules. Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN at the address shown on page 2.



HERE and THERE

ARRL says scanner proposals could hurt hams

The ARRL has told the FCC that some of its recent proposals to tighten scanning receiver rules "constitute severe regulatory overkill" and could harm law-abiding amateurs. The League made the comments in response to last month's FCC Notice of Proposed Rulemaking (ET Docket 98-76).

The ARRL said it's "sensitive" to the FCC's concern that devices not be able to readily intercept cellular calls. But, the League added, some of the FCC's proposals could result in "insufficiently defined regulations" that would prohibit or unreasonably restrict the making and selling of ham and test gear. Some product lines could become prohibitively expensive or prohibited altogether by the proposals, the League asserted.

Among other things, the League asked the FCC to avoid requiring scanning receivers in ham equipment to block access to frequency-control circuits, and to not entirely prohibit frequency converter or transverter kits for use in the Amateur Service. The League said the net effect of the kits ban would be to prohibit any frequency converters, even though they would not be used or useful for cellular reception, and asked the FCC to create an exception for Amateur Service frequency converters.

The League also asked that amateur receivers not be required to undergo potentially expensive direct-pickup immunity testing, and it urged the Commission to more clearly define its proposed rules to avoid unintended consequences that could adversely affect hams.

The League agreed that some extended coverage ham transceivers have image responses that make them able to receive cellular signals. But the League said this is not widespread and "largely not an issue in the Amateur

Service," because the transceivers are not made, marketed, bought, or used for cellular image reception. Manufacturers could configure products to preclude cellular image frequency reception, the ARRL said.

The League said that current language banning the manufacture or sale of scanning receivers that are "capable of readily being altered" is sufficient. But the ARRL said requiring tuning and control circuits be made inaccessible would be "an overbroad requirement," and that potting or encapsulating frequency-control hardware "is simply unnecessary for most amateur equipment." The League said such a requirement would limit the ability of hams to legitimately experiment with or to even repair their own equipment and could needlessly drive up the cost of ham gear and make repair expensive or impossible. "The potting requirement is severe regulatory overkill and should not be enacted," the League said. "There are sufficient, less burdensome regulations now in effect and as proposed."

The League also called the FCC's proposed definition of test equipment "unreasonably limiting" and advised the Commission to correct the problem by eliminating the word "professional" from its definition.

A copy of the League's full comments is available at <http://www.arrl.org/announce/ET98-76-cmt.pdf>.

The ARRL Letter, 7/17/98

NY taxi inspections nab radio offenders

An effort continues to eliminate illegally modified Citizens Band radios that can operate on the 10-meter amateur band from New York City taxis. Gerry Smith, W6TER, reports that on July 2, the New York City Taxi and Limousine Commission (TLC)—in cooperation with the Port Authority Police and two inspectors from the New York FCC Field Office—inspected CB radios installed in NYC taxis at the Kennedy Airport taxi holding lot. An ad hoc committee has been formed to deal with the illegally modified CB radios in the taxi fleet (see *QST*, June, p 66-67). Smith praised the effort as "highly successful."

The TLC issued seven tickets to taxi owners alleging violation of the TLC rule forbidding radios capable of operating outside of the authorized 40 CB channels. The

SPECIAL EVENT STATIONS

Submarine "Cobia"

Special event station W9DK (ManCoRad radio club) in Manitowoc, WI, will be operating from the WWII submarine "USS Cobia" to commemorate the 54th anniversary of its first war patrol in the Pacific. Date and time: August 15th (Saturday) from 1400-2000Z (9 a.m. - 3 p.m.) on 7250 and 14,250 kHz SSB.

For certificate: send QSL and #10 SASE to: Fred Neuenfeldt, W6BSF, 4932 So. 10th St., Manitowoc, WI 54220-9121.

Guest operators are more than welcome to come aboard and participate if in the area. The sub is located at the maritime museum in downtown Manitowoc.

Fred Neuenfeldt, W6BSF

EAA Convention and Flyin

The Fox cities ARC (Appleton WI) will operate special event station W9ZL from the EAA (Experimental Aircraft Association) flyin and convention (EAA AirVenture '98) at Wittman Regional Airport in Oshkosh.

SSB HF operation will begin on Friday, July 31, and run through Sunday, August 2 in the General portions of the phone bands. RTTY operation will be mostly on 7085 and 14.085. Operators of the club will man the station from 9 a.m. to 4 p.m. daily.

A special 8 x 10 certificate is offered for contacts with proper QSLs.

QSL to Wayne Pennings, WD9FLJ, 913 North Mason, Appleton, WI 54914.

Wayne Pennings, WD9FLJ

cab owners face fines ranging from \$100 to \$350. One taxi driver surrendered his CB radio to an FCC inspector on the spot!

The TLC and FCC inspected the radios for proper transmit frequencies. Frequency measurements were made using equipment donated to the TLC by the ad hoc committee. The TLC has promised to continue its airport and on-street inspections.

The ARRL Letter, 7/17/98

Digital communications conference: September in Chicago

The 17th annual ARRL and TAPR Digital Communications Conference will be held this year in Chicago. The conference will be held September 25-27, 1998, at the Holiday Inn Rolling Meadows, just minutes from Chicago's O'Hare Airport. This marks the third year the ARRL and TAPR have joined forces for this event, which includes the conference and TAPR's annual general meeting.

The ARRL and TAPR Digital Communications Conference is an international forum for radio amateurs in digital communications, networking, and related technologies. It's an opportunity for conferees to meet, publish their work, and present new ideas and techniques for discussion. Presenters and attendees have the opportunity to exchange ideas and learn about recent hardware and software advances, theories, experimental results, and practical applications. The DCC is not just for the digital expert, but for digitally-oriented amateurs at all expertise levels.

The conference also provides a weekend of fun for all who have more than a casual interest in any of the ham digital communications modes. This includes APRS operators, digital networks, software writers, modem designers, and digital satellite enthusiasts.

This year's conference again provides multiple session tracks for beginning, intermediate, and advanced presentations on selected topics in digital communications. Topics will include APRS, satellite communications, TCP/IP, digital radio, spread spectrum, and many others.

In addition to a presentation of papers on Saturday, three symposia/seminars will be held. These sessions are provided to allow those with additional time and interest to make the most of the conference. Separate registration is available for these activities; those wishing to attend don't have to register for the full conference. Topics include the Second Annual APRS National Symposium (Friday, all day); "Infrastructure Technologies in Amateur Radio," conducted by Don Lemke, WB9MJN; "RUDAK Future Operations and Experimentations," by Lyle Johnson, WA7GXD; and "Packet Radio Networks with Millions or Billions of Stations," by Tim Shepard, KD1KY.



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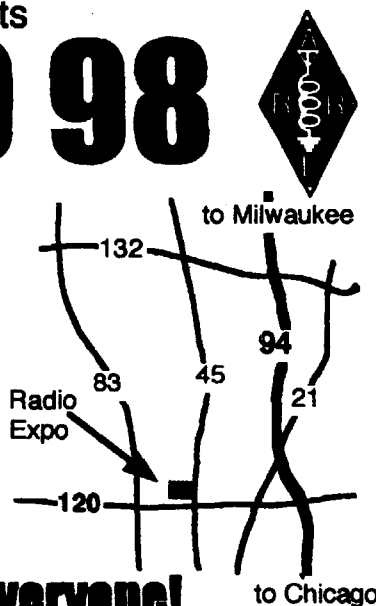
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Richard Paczkowski, Jr., KF4BIA, named 1998 "Young Ham of the Year"

(Los Angeles, CA) -- A 16-year-old ham radio operator from Florida who had a true "baptism of fire" on the air has been named the 1998 "Young Ham of the Year." Award Administrator Bill Pasternak (ham radio callsign WA6ITF) says Richard Paczkowski, Jr., (ham radio callsign KF4BIA), of Edgewater, Florida, is being recognized for his accomplishments in emergency service communications.

The Young Ham of the Year (YHOTY) award is jointly sponsored by Pasternak's Los Angeles, California-based *Amateur Radio Newsline*, Yaesu USA Corporation of Cerritos, California and *CQ Magazine* of Hicksville New York.

Richard Paczkowski, Jr., is the son of Richard Paczkowski, Sr., (KE4ZTP), and Joan Paczkowski. He holds a Technician-class license and attends New Smyrna Beach High School. He was selected as this year's YHOTY recipient based on his four-year Amateur Radio career that has been dedicated almost exclusively to public service work, including organizing support communications during the recent Florida wildfires.

According to Patricia White, N6LKC/4 of Crescent City, Florida, who nominated Richard, one of his biggest challenges came June 30, 1998, when the wildfires grew more intense. The area's amateur radio Emergency Coordinator had been called out of town on personal business when news came that more hams were needed to help. The job of organizing the region's hams into an instant corps of skilled communicators fell to Richard as Assistant Emergency Coordinator.

Paczowski coordinated operators when the Red Cross advised that six shelters were opening in Volusia County alone. Hams in neighboring Orange County were also contacted and agreed to help. Richard Paczkowski is also being credited for working shifts at the emergency operations center until after midnight -- and providing communications services even when his own home was in danger.

Richard says that he became a radio amateur because he wanted the ability to communicate with his father while the elder Paczkowski was at work. The father and son team studied together to obtain their ham tickets with the long range hope of being able to schedule contacts with Richard's uncle, Bill Paczkowski, KT4OM, who lives in North Carolina.

Richard became involved in public service and emergency communications as the direct result of joining his local Volusia County "Amateur Radio Emergency Service (ARES)" unit. There he has held many positions including newsletter editor; web page creator/administrator, and eventually, Assistant Emergency Coordinator.

In addition to holding the post of Assistant Emergency Coordinator, Richard is also a member of SKY-WARN (an amateur radio severe weather reporting organization that forwards information to the National Weather Service). Richard is a trained "Weather Spotter" in the program.

Richard is also a member of the Daytona Beach Amateur Radio Association and the Coronado Wireless Association. He is also in the process of joining the Florida "Coast to Coast Chapter" of the American Red Cross. Richard is fully trained in "Mass Care" and "Damage Assessment" techniques and plans to use this knowledge as a Red Cross volunteer.

Presentation of the 1998 *Newsline* Young Ham of the Year Award to Richard Paczkowski, Jr. (KF4BIA), will be made on Saturday evening, August 15th, at the Huntsville Hamfest banquet in Huntsville, Alabama. The award ceremony will be co-hosted by Bill Pasternak (WA6ITF), of *Newsline* and YHOTY Award Committee Chairman Larry Zettwoch (KR4IF). Also present will be representatives of corporate underwriters Yaesu USA, and CQ Communications.

The presentation of the award as a regular feature of this prestigious amateur radio convention has been made possible through the generosity and kindness of and the Huntsville Hamfest Planning Committee and its Chairman Mr. Walter "Scotty" Neustadter, W4WW.

As "Young Ham of the Year," Richard Paczkowski Jr., will receive -- courtesy of Yaesu USA -- an all-expense-paid trip to the 1998 Huntsville Hamfest, along with a gift of Yaesu ham radio equipment. *CQ Magazine* will treat Richard to an all-expense-paid week in Space-camp Huntsville. The magazine will also present him

Scholarship awards named by Foundation for Amateur Radio



Includes awards from three philanthropic Wisconsin clubs

The Foundation for Amateur Radio, Inc. is pleased to announce the 1998 winners for the sixty-seven (67) scholarships which it administers. Of those 67, three Wisconsin Amateur Radio clubs offer scholarships available through FAR.

WARAC Memorial Scholarships

Sponsored by the West Allis Radio Amateur Club: 3 at \$1000 each

Jessica L. Winzenried, KB9AMX, Stevens Point
Kurtis M. Kaun, N9PPF, Menomonie
Michael R. Placek, KB9SCH, Oak Creek

South Milwaukee Amateur Radio Club

4 at \$500 each

Joseph A. Streeter, AA9TV, Fond du Lac
Wayne M. Poole, KB9ROV, Manawa
Michael M. Imrick, KB9LPI, Mason
David J. Bahr, KB9GHE, Sheboygan

Ozaukee Amateur Radio Club Scholarship

1 at \$1000

Christopher D. Molek, KB9GTK, Richland Center

All winners this year are Wisconsin residents.

The scholarships were open to all licensed radio amateurs meeting the qualifications and residence requirements of the various sponsors.

The Foundation is a non-profit organization incorporated in the District of Columbia, representing more than seventy-five clubs in Maryland, the District of Columbia, and Northern Virginia. It is devoted exclusively to the scientific, literary, and educational pursuits that advance the purposes of the Amateur Radio Service.

The announcement for our 1999 awards will appear in the January or February issues of the major Amateur Radio publications and selected radio club newsletters, including this paper.

Please note our new address: FAR Scholarships, Post Office Box 831, Riverdale, MD 20738. ☐

with a variety of CQ products. *Newsline* will provide Richard with a commemorative plaque at the award ceremony. The cost of this year's plaque has been underwritten by Dave Bell (W6AQ) - President of DBA Entertainment Inc, Hollywood, California.

The *Amateur Radio Newsline* is the awards administering sponsor. *Newsline* is an all volunteer group that provides personal communications news as over the telephone and Internet. It has been serving Amateur Radio since 1977.

The corporate underwriters of the "Newsline Young Ham of the Year Award" are world leaders in their respective areas of amateur radio product support. Yaesu U.S.A. Corporation is a trailblazer in the design, manufacture and distribution of high quality amateur radio and commercial two-way radio equipment.

CQ Magazine and its sister publications *CQ-VHF* and *CQ-Contest* are owned by CQ Communications and considered the trend-setting publications serving today's modern radio amateur.

The *Newsline* Young Ham of the Year award program, (formerly the *Westlink Report* Young Ham of the Year) now entering its 14th consecutive year, is presented annually to a licensed radio amateur (ham) who is 18 years of age or younger and who has provided outstanding service to the nation, his community, or the betterment of the state of the art in communications

through the amateur radio hobby/service.

Past recipients of the Young Ham award include Shawn Alan Wakefield, WK5P, of Bartlesville, Oklahoma (1986); David Rosenman, KA9PMK, of Muncie, Indiana (1987); Jonathan Binstock, NK3D, of Potomac, Maryland (1988); Erin McGinnis, KA0WTE, of Topeka, Kansas (1989); Mary Alestra, KB2IGG, of Staten Island, New York (1990); Richard S. "Sammy" Garrett, AA0CR, of St. Louis, Missouri (1991); Angela (Angie) Fischer, KB0HXY, also of St. Louis, Missouri (1992); Kevin Boudreaux, N5XMH, of New Orleans, Louisiana (1993); Allison Daneen Zettwoch, KD4CKP, of Louisville, Kentucky (1994); Adam Weyhaupt, N9MEZ, of Alton, Illinois (1995); Toby Metz, KB7UIM, of Boise, Idaho (1996) and Brian Milesosky, N5ZGT of Albuquerque, New Mexico (1997).

The award sponsors wish to also thank *CQ-VHF Magazine*, *Amateur Radio Trader Magazine*, *Worldradio Magazine*, *QST Magazine*, the *ARRL Letter* and the *W5YI Report* for assisting in soliciting nominations for the 1998 award.

- Thanks ARRL, *Newsline*

**Young Ham of the Year donates part of award to
Make a Wish Foundation**

Please turn to page 15

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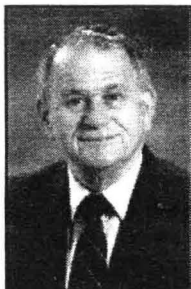
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AUGUST 1998

The Computer Corner

By Stan Kaplan, WB9RQR • 105 Martin Drive
Port Washington, WI 53074-9654
(414) 284-9346
WB9RQR @ N9PBY.EN63BI.WI.USA.NA
SKAPLAN @ MCW.EDU



No. 57: How Keyboards Work

Keyboards are neat devices. They represent a way for us humans to use our most dexterous appendages to tell a machine what we want. Just about everyone uses one, but few really know how they work. Lets see if I can do a decent job of explaining it to you.

First, pull the keyboard plug out of your computer and take a look at its end. Just about all IBM PC, XT, AT and compatible keyboards sport the same connector, a 5-pin DIN plug. Only a few brands and the IBM PS/2 use a slightly different, 6-pin plug. Now look at the keyboard itself. Yours has between 83 and 102 keys, and each key is simply a SPST switch. Now, fellow hams, it should be clear that 5 wires cannot directly carry the on/off state of 100 or so SPST switches. If they were wired directly, as you or I would wire the on/off switch of a power supply, the keyboard cable (about 3/8 inch in diameter) would need to be expanded to nearly 8 inches in diameter! Obviously, there must be some other way that the state of the 100 switches is sent to the computer.

The secret is that each keyboard is itself a miniature computer. Inside each keyboard case is a microprocessor chip whose job it is to look at the state of each key every now and then. Every now and then to a keyboard microprocessor means every couple of microseconds - close to a million times per second! If it finds during its scanning of the keys that one has been depressed, or released, it then generates a one-byte (8 bits) "scan code". It sends this code down the cable to the computer as serial data - much like a single file line of people walking down a narrow hallway.

Well, if this is all true, then the microprocessor should need only one or two (signal and ground) wires to send stuff to the computer. Here is the assignment of the five pins:

PIN	FUNCTION
1	Keyboard clock signal to the computer
2	Data line to the computer
3	Unused
4	Ground
5	+5 volt supply to the keyboard from the computer

See? Pin 2 carries the data and pin 4 is the ground. Pin 5 provides juice to the keyboard from the computer, so that the microprocessor feels well nourished and the LEDs will work. The only other useful wire is connected to pin 1. That's a sort of metronome line - tick tock, tick tock - from the clock circuit in the keyboard, so the computer and keyboard can be in synchrony when data is passed. Ever look inside a keyboard? There is a crystal in there, along with the microprocessor. The crystal controls

Now, what about this "scan code" business? How exactly does that work? When you press, for example, the letter A key, the keyboard microprocessor detects that you have done so. It sends the code 1Eh (one-E; the h stands for hexadecimal notation) down the wire attached to pin 2. When you let go of the key, it also detects that but sends different code, 9Eh, down the wire. The message is received by another microprocessor in the computer called the keyboard controller chip. The keyboard controller then tells the CPU (386, 486 or pentium chip) that a keyboard event has occurred by sending the CPU a hardware interrupt. The CPU pauses from whatever it was doing and tells the ROM (Read Only Memory) BIOS (Basic In/Out System) about it. The BIOS then reads the scan code and takes action depending upon what key was pressed, or if it was released, and what else is going on at the time. If, for example, you are at a DOS prompt and you pressed and released the letter A, it echoes the letter to the screen and also puts a copy into a buffer for temporary storage.

Whew! A lot of things going on when you simply press or release a key! But now you can understand why, when you hold a key down, the character is repeated. The keyboard controller chip knows you have pressed a key, but that you haven't released it yet. It tells that to its buddy the CPU, who tells it to the BIOS, and the BIOS knows that it is supposed to repeat characters until the key is released. When you finally release the key, the BIOS gets the new scan code message and it quits sending characters to the screen.

There are some variations on this scheme. When you press and hold the Shift, Ctrl or Alt key, a unique scan code is generated and sent but the BIOS takes no action until you press another key, for example the letter A. When you finally press the letter A, the A's 1Eh is preceded by the unique scan code and sent to the keyboard buffer. Unique means unique. The left shift generates 2Ah when pressed and Aah when released, while the right shift key sends 36h on make and B6h on break. You see, your computer really does know the difference when you press the left Alt key versus the right! Only a few key pairs are the same. Pressing the 5 key at the top of the keyboard generates the same scan code as pressing the 5 on the number pad (provided the Num Lock is on). In other words, the computer can't tell the difference when you press either of these two keys. But it sure can when you press the left Alt versus the right, or the left Ctrl versus the right.

Some other keys change their scan codes completely if the shift key is pressed and held first. For example, Num Lock is E0h 35h when pressed, but AAh if the shift key is held down first. On release, Num Lock sends E0h B5h, but E0h B5h 2Ah if the shift key is held down first. Still other keys change their code if a Ctrl key is held down first, and send an even different code if preceded by holding down an Alt key. Probably the weirdest scan code belongs to the Pause key, a key rarely used by anyone. It sends out a long string (E1h 1Dh E1h 9Dh C5h) when pressed, and nothing at all when released. Also pretty strange from a use point of view is the Sys Req key, added in 1984 for some function which never panned out. But, it is still there today, with a scan code all its own. By the way, you can assign your own special functions to the weird keys, in DOS and even Windows 95.

The keyboard is truly an ingenious device. Today's models are very reliable and the prices have plummeted. You can get a fully functional model for about \$10, making it (unfortunately) another disposable item. Many find their way into landfills, and will probably be cursed by future landfill miners for breaking their equipment.

After this exploration of keyboards, let me leave you with a prediction. These devices are clearly on their way out. When you buy a new computer a few years from now, it will not come with a keyboard, just a microphone. You will speak your commands, or just point on the screen from across the room with a gadget like a laser pointer. That technology is already with us. And, of course, the computer will speak when a reply is warranted, just like Hal in 2001. A few years after that, you won't need a microphone or a pointing device. The computer will be tuned into your brainwaves, so you will just need to think your commands. Happy computing!

Reprinted, by permission, from the ORC Newsletter, Ozaukee Radio Club, 101 E. Clay Street, Saukville, Wisconsin 53080-1903 (Skip Douglas, KA9DDN, Editor). □

The Fun Continues with Icom's Newest Radio Station On Wheels

Bellevue, WA--The Icom Fun Mobile, the largest radio station on wheels, left Icom America on April 3, 1998 to begin its year long tour of North America. The Fun Mobile, heading south along the western coast, across the southern states and north through the east, Midwest states, and Canada has visited over 26 states and 2 provinces with 182 destinations including 126 cities, 10 hamfests, and 43 radio clubs.

Icom's Fun Mobile, a 30 foot long motor home outfitted with multiple operating radio stations, received its largest attention at the Dayton Hamfest with over 25,000 radio users in attendance. The Fun Mobile has received numerous praises from its audiences that exclaim, "This van is amazing. I wish I could borrow it." Justine Marrese, N1TZD. "Well presented and professionally explained." Bill Curtis, K2BIL. "Well worth running after!" Kenneth G. Ranson, N5VHO. And even being flagged over to the side of the road in California by an avid radio user!

Unique in its own, the Fun Mobile is also searching out and going where it has not gone before. As well as the major city visits, the Fun Mobile is stopping in some smaller communities and special events, such as the National Science Center (NSC) Fort Discovery, in Augusta, Georgia. Sponsored by the U.S. Military, this science center educates and fascinates kids with science. Joining this effort of science awareness for kids, Icom is honored to display today's radio communication technologies.

The Fun Mobile has been the place of excitement for radio users as a hands-on demonstration of current radio capabilities. With radios for all applications from ama-



teur to marine and avionics to business, Icom has something for everyone. Don't miss the Icom Fun Mobile as it travels around North America. Simply look for a 30 foot RV covered with the Icom logo and bigger-than-life size action pictures of Icom radios. If you see the Fun Mobile down your road, listen in on 146.5 MHz.

Looking for future destinations of the Icom Fun Mobile? Then visit Icom's web site at <http://www.icomamerica.com> and follow the Fun Mobile from city to city, read the comments of our visitors, and view action pictures as Icom travels the nation.

- Icom

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The new Code Tutor is the Cadillac of all Morse code trainers, and is designed for Volunteer Examiners, ham clubs, teachers, Elmers, schools and hams who want the best there is.

Professional features include an LCD readout, printer port, audio tape recording output, loud powerful audio with true sine wave and no key clicks, computer interface, stores 16 FCC exams for VEs, HF/VHF radio interface for on-the-air practice, and is a full-featured memory keyer, and much more.

The MFJ-414 has everything that's in the MFJ-418 pocket size code tutor, plus more. You get all of the popular features of the MFJ-418 that have made it the most widely used code tutor in the world.

The printer port is useful for printing out correct answers for students to check copy after a code practice session. You can record high quality code tapes for

Continued on page 7

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N9CK	Steven J. Franzen	McFarland	N9CK@inxpress.net
N9CLG	Ed Pliner	Pittsville	n9clg@badger.tds.net
KF9CS	Mark Heimmermann (WAR Secretary)	Appleton	kf9cs@execpc.com
			www.execpc.com/~kf9cs
KB9CSW	David Sparring	Portage	kb9csw@juno.com
KG8CX	Ed Engelmann	Menominee, MI	KG8CX@webtv.net
KA9D	William G. Menzel	Wisconsin Rapids	menzelw@wctc.net
			www.wctc.net/~menzelw
KB9DAC	Kevin King	Shawano	kb9dac@juno.com
K9DB	Paul Nelles (Rib Mtn. Rptr. Assn.)	Mosinee	nelles@dwave.net
N9DG	Duane Grotophorst (ex KA9HKL)	Sauk City	dgrotophorst@jvlnet.com
K9DHR	Ade Van Der Burgt	Kaukauna	*** SILENT KEY 4/25/98 ***
N9DJY	Judy Papke	Pittsville	n9djy@juno.com
N9DMS	Dave Schaeffer	Madison	n9dms@globaldialog.com
N9DXZ	Dave Asplin	Marshfield	asplin@dgabby.mfldclin.edu
K9EF	Woody Minar	St. Croix Falls	WISBRED@aol.com
W9EH	Bob Burgermeister (ex WB9IUY)	Kenosha	burgerb@execpc.com
N9EIL	Debra Kroll	Wisconsin Rapids	n9eil@tzn.net
KB9ENO	Bill Niemuth (WAR Vice Chair.)	Hortonville	bnemuth@execpc.com
KA9EOX	Jack Tinsman	Shawano	ka9eox@juno.com
KB9EQI	Karl E. Simonson (VE Adams Co. ARC)	Necedah	kb9eqi@iname.com
WD9ESU	Larry Shields	Lodi	larrysh@itis.com
N9FA	Jim Ley	Menomonie	ley@uwstout.edu
K9FA	Dick Lemme (ex KB9FA)	Oshkosh	lemme@vbe.com
KA9FAS	Mary Eiden	Stevens Point	maiden@coredcs.com
			www.coredcs.com/~maiden/index.htm
KE4FE	Gary Day	Rib Lake	ke4fe@newnorth.net
K9FHI	Roy Pedersen (Section Mgr. ARRL)	Juneau	k9fhi@tccom.net
KA9FOX	Scott Neader	Onalaska	neader@centuryinter.net
			www.QTH.com/ka9fox
K9FZ	Al Lapinski (ex AA9MP)	Hudson	alap@pop3.spacestar.net
N9GAF	M. L. "Pete" Deets	Madison	15.pd@madison-business.com
W2GC	Jim Cronn	Two Rivers	cronn@w2gc.cftnet.com
KA9GCW	Jim Kline	Ladysmith	jkline@centuryinter.net
K9GDF	Rich Regent	Milwaukee	rich.regent@bbs.pid.org
W9GF	Jerry Padness	Stevens Point	maingan@coredcs.com
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N6GFV	Charles Smalley	Madison	n6gfv@compuserve.com
KG9GH	Eric Janssen	Marinette	kg9gh@mrnet.com
N9GHZ	Mike Schoenfluss	Abbotsford	muzikman@pcpros.net
			www.pcpros.net/~muzikman
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WA9GON	Gerry Radtke (Fox Cities ARC)	Appleton	geradtk@execpc.com
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N9LEA	Jason Hanson	Madison	jihanson1@students.wisc.edu
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N9LIA	Jacob Klein	Wausau	n9lia@pcpros.net

AMATEUR RADIO COMMUNICATIONS IN DISASTER SITUATIONS

Jim Romelfanger, K9ZZ, editor

In the May, 1998 issue of the *APCO Bulletin*, the subject of using cellular telephones in emergencies is discussed in depth. There is not room enough to reprint the entire piece on "Disaster Prep".



It presents a scenario in which cell phones fail during a large emergency due to circuit overloading. If memory serves, when TWA Flight 800 exploded off the east coast and dropped into the Atlantic, that is exactly what happened. Too many people on cell collapsed a site. Then, a second, portable site was erected. Still not enough.

The story says that each cell site is equipped to handle no more than about 22 calls at a time! When the above-mentioned aircraft went down, cell did the same. But Amateur Radio/ARES circuits kept right on working.

The story says, "Somewhere along the line, the system begins a slow downward spiral toward collapse. This is not the fault of the cellular service providers because their equipment was designed to handle a given amount of calls per minute per cell." Interesting.

Further, "... The normal cell sites have about 22 receivers. Each receiver on a cellular system can handle only one call at a time. Therefore, caller number 23 is effectively locked out of the system until a caller hangs up or moves into another cell area where the system has an open receiver.

"Then, once the caller is able to place a call, it is routed to a hard-line telephone system. If the local telephone system has reached a saturation point, the caller will once again hear, 'All circuits are busy now; please try your call later.'" Just what a disaster relief worker wants to hear, right?

It seems fairly clear to me that although the ham radio mission for ARES and RACES is changing, that need will always be there. It's always been true that when no one else can get information from point A to point B, the radio amateurs can.

It would also seem foolish at best for any agency who currently has a working relationship with amateurs to throw it out in favor of "new technology." That would be truly throwing the baby out with the bath water.

(Thanks to Dave Barquist, K9PAK, for sending the APCO information.) □

NEW PRODUCTS

Continued from page 6

additional home study. A serial port lets you up or download custom practice groups to or from your personal computer.

If a student is having trouble with certain characters, you can build and save three custom sets (16 characters each) for extra practice. You can combine these to give you 48 characters for using the KOCH method. You can customize random words for practice, too.

You can use your MFJ-414 with your 144/440 FM handheld or HF transceiver for on-the-air Morse code practice with your buddies or an entire club. VECs can give up to 16 FCC exams. You can computer generate actual FCC exams and download them to the MFJ-414 to test future hams and upgrades.

It's a full-featured memory keyer, too. It has a 100-character memory, semi/auto modes, iambic A/B, reverse paddle, change speed and tone on-the-fly. You can practice sending into the MFJ-414 with an iambic paddle or straight key.

Use built-in powerful speaker or external speaker or headphones. Includes serial port cable and open-end patch cable (soldering required). Use 12 VDC or 110 VAC. 8 1/2W x 2 1/4D x 6"D.

MFJ's Professional Classroom Morse Code Tutor comes with MFJ's *No Matter What*™ one year limited warranty. That means that MFJ will repair or replace (at our option) your tutor for one complete year.

To order, or for your nearest dealer, call (800) 647-1800, FAX (601) 323-6551; e-mail: mfj@mfjenterprises.com, or check out dealer and ordering information on our fantastic Web site: <http://www.mfjenterprises.com>. □

Wisconsin Amateur Internet Addresses

CALL	NAME	CITY	E-MAIL/URL
WB9LKC N9LKY N9LOO	Ray Sommers Jim Paul Brian Strenzy	Custer Merrimac Jackson	rsommers@coredcs.com n9lky@shopstop.net n9loo@execpc.com www.execpc.com/~n9loo
AA9LV K9LWI N9LWJ KB9LYT W9LZQ WB9M K9MA KE9MA WB9MFC N9MKJ	Francis A. Goettl, Jr. Lawrence Steeno Jan Garake Kris Scheppe Kost Helman Gary Sharbano (Badger Examiners) Scott Ellington Gene Kroll Marilya Lassanske Bill Rupp (Milw. Foxhant Club)	Elkhart Lake Poynette Sheboygan Falls Onalaska Brown Deer Madison Wisconsin Rapids Wautoma Franklin	fgoettl@excel.net lsteeno@execpc.com jgarake@itis.com socrates@sts.net khelman@centuryinter.net wi9m@execpc.com sellington@asec.wisc.edu ke9ma@tzn.net wb9mfc@wirural.net wrupp@execpc.com www.execpc.com/~wrupp
KB9MKP K9MLD AA9MT K9MV N9NBC W9NFI	David DePover Joel Eschmann Glenn De Baker Jim Staatz (ex WB9RBP) ARES/SKYWARN Ken Knoff Keith Belongia (ex N9PBA)	Juneau Hartford Manitowoc Eau Claire Kenosha Racine	kb9mkp@tccom.net joelw@nconnect.net gdebaker@lakefield.net kg9mv@ecol.net n9nbc@qsl.net keithbel@execpc.com www.execpc.com/~keithbel
N9NGH AA9NM W9NNS KB9NNV	Jim Phillips Bob Pratt Rev. Bill Jablonke Nathan A. Luthardt	Hudson Neenah Weston Marinette	n9ngh@amsat.org Baa9nm@aol.com wjablon@mtc.net MortalKombat@mari.net http://mari.net/subzero
N9NOF N9NTB W9NUE K9NW N9OEQ KB9OFK K9OGT N9OIG KB9OKM N9OO	Keith Summers Mack Brophy Roger Ken Rogers Mike Tessmer Chuck Hanson Mark Cassellias John Klein, Jr. Kevin Drisel Jason Matthias Don Baska	DePere Sun Prairie New Berlin La Crosse Appleton Onalaska Beaver Dam Union Grove Ashland Kenosha	keiths@dct.com dmb@execpc.com rkrogers@execpc.com K9NW@aol.com crhanson@athenet.net drmarkdc@aol.com johnklein@itol.com n9oig@wi.net MJ3721@wheeler.northland.edu n9oo@qsl.net www.qsl.net/n9oo
K9OQO KB9OUC	Jim Sheetz (WAR Treasurer) Charles Buggs	Appleton Janesville	k9oqo@aol.com kb9ouc@ticon.net www.ticon.net/~kb9ouc
W9OVO KY9P K9PAK KB9PCW N9PHF W9PHF N9PHS WA9POV	Clayton Cardy Keith Shilavy Dave Barquist Austin Kyser Dawn Bergs Ray Greisinger Wes Jones Dave Knuss	Sturgeon Bay West Bend Oconomowoc Appleton Wausay Green Bay Shell Lake Grafton	w9ovo@itol.com ky9p@execpc.com dbarq@execpc.com kb9pcw@callsign.net dberga@juno.com GREISINGR@UWGB.EDU n9phs@syslan.net wa9pov@execpc.com www.execpc.com/~wa9pov
N9PQN N9PQU AA9PT K9PT W9PVD N9PQ WB9QBA KA9QFJ KB9QGB	Marilyn Franzen Jeff Rymer Mark A. Warner Dean Andrewjeski (ex AD9W) Gordon Lander Eugene F. Schultz George Gruetzmacher William H. Hommel, III Dave Christel	McFarland Pound Mosinee Webster Sheboygan Sun Prairie Baraboo La Crosse	N9PQN@inexpress.net jrymer@ez-net.com aapt@discover-net.net andrewjesk@pcpros.net w9pvd@win.bright.net gene183@juno.com grgruetz@vms2.macc.wisc.edu billh@baraboo.com kb9qgc@qsl.net www.qsl.net/kb9qgc/atv.html
KB9QGB	Jeff Kane	Thiensville	jkane@execpc.com www.execpc.com/~jkane
K9RI AA9RK	Ray Wolfe (ex WB9LST) (Kenosha EC) Mike Falk	Kenosha West Allis	wolfeman@execpc.com mj27@iastate.edu http://ods.ods.net/ketchup/index.htm
N9ROY WB9RQR N9RSU K9RTB W9RTP KA9RZL WB9SBD KB9SCZ WA9SFH AA9SJ AA9TB K9TNT N9TNW N9TPY K9TST WB9TYT NE9U N9UAK N9UBQ KC9UC N9UDO	Rick Plouffe Stanley Kaplan (OZARES EC) Leroy A. Dick, Sr. Bob Klein George K. Stanek John G. Rusfeldt Joe Mayenschein Van Tully Jerry Thompson Steve Eisold Mariann Littell Jack Izzard Bill Vincent Richard Swierczynski (Skywarn) Jeffrey A. Schuh Dan Bolander (WAR Freq. Coord.) Scott Jasper Lois Wise Roland Sacho Bill Bergs Steve Schulze	Wisconsin Dells Port Washington Eau Claire Luxemburg Edgerton Racine La Valle Little Chute Brown Deer Sheboygan Glendale Platteville Kimberly Milwaukee Tigerton Milwaukee Plover Tomahawk Medford Wausau Baraboo	rplouffe@midplains.net skaplan@post.its.mcw.edu n9rsu@werewolf.net bklein@itol.com w9rtp@juno.com diver@wi.net mayenl@mw.net KB9SCZ@qsl.net jerthomp@execpc.com seisold@prodigy.net mariann@csd.uwm.edu k9tn@mhic.net wvincent@execpc.com richardj@omnifest.uwm.edu kf9ts@frontiernet.net bolander@execpc.com jasper@tccom.net wisewynn@newnorth.net tcemlepc@waun.tdsnet.com bbergs@dwave.net steven9udo@baraboo.com www.thelox.com/~sschulze
N9UDX KB9UE W9UGT N9UNR N9UPU	Wayne Burgess Tom Kinney Bill Aspinwall Dave Barrow Joe Tenor	Madison Tomahawk Lodi Cedarburg Green Bay	n9udx@midplains.net tkinney@newnorth.net w9ugt@compuserve.com n9unr@execpc.com jtenor@sparknet.net www.sparknet.net/~jtenor/gbasfg.html
K9UTQ K9UUT K9UW N9UXG N9VPZ K9VSO N9VST	Gene Santoski Roes Roberts Mike Pagel (ex KA9LAQ) Sue Wiskow David Cooley Jim Breszee Mac Punkhouser	Wisconsin Rapids Racine Amherst Arcadia New Holstein Madison Ripon	k9utq@wctc.net reesr@wi.net pagel@wi-net.com jcwiskow@win.bright.net dcool@fldotnet.com k9vso@itis.com macgyver@n9vst.com http://n9vst.com/wpwin
AA9W WB9WBN N9WBR KB9WC K9WD K9WI K9WIX N9WUN N9WVD	Ed Rate Gerald Werner Jeff Ramlow Jack Bremer Steve Schwogler John Kaiser Clancy Meneau (Manitowoc Co. RACES) Charles Savard (Mancorad Club) Kirt Krause	Mequon Marshfield Amherst Junction Markesan Wisconsin Dells Oshkosh Kellnersville Manitowoc Iola	edrate@execpc.com wernerg@dgabby.mfldclin.edu ramlow@wi-net.com jbbremer@juno.com srs@baraboo.com jkaiser@vbc.com cmeneau@mail.tcbl.com cesavard@juno.com n9wvd@geocities.com www.geocities.com/CapeCanaveral/Lab/8279
KA9WXX W9XX K9XX KA9YAW W9YCV N9YJO N9YJ N9YLS W9YOA	Dave Schank Ronald Schaden (Mancorad Club) Guy A. Boucher Wes Michael Lester Peterson David C. Peterson Bruce Schaffer Lee Housey Jack Klein	New Berlin Two Rivers Marshfield Green Bay Greenfield Chippewa Falls Augusta Sheboygan Beaver Dam	drsc@sil.gmtcom.com schaden@mail.tcbl.com guyboucher@tzn.net Ka9yaw@aol.com LesW9YCV@aol.com dcpeters@discover-net.net n9yjj@discover-net.net lhousey@excel.net jklein@peoples.net

The Badger Weather Net: #1!

By Rick Elsner, W9RCW

We are looking for radio amateurs who can join the #1 ham radio weather net in all of the U.S.A. This is not a brag! It is a comment from Mr. Rudy Schaar, Data Acquisition Manager for NOAA Weather, located in Sullivan, Wisconsin.

It does take commitment to record some basic weather data and then transmit that to the Badger Weather Net. The net meets daily, 365 days a year (366 in leap years) on 3.985 MHz. The "official" time of the net is from 0600 time to 0715 local time. If you are a *real* early bird, hey, no problem! We have a few stations who start collecting weather data as early as 0330 local time. One of the best and with a great signal is Jim, WB9YPY.

Yes, Rick, that *is* great, but I am not going to spend several hundred dollars on weather data recording equipment! Hold it right there - no need to do that. You can run down to your local store and get a rain gauge for less than \$3.50. Then, a high/low recording thermometer can be bought for anywhere between \$15 and \$20.

Great.. now I have my rain gauge and HI/LO thermometer and I've spent less than \$25. What do I do next?

Simple. Get a piece of paper and a pencil and make an easy chart. Make six columns. Across the header line, write the following: MESSAGE NUMBER, DATE, HI, LOW, RAIN, WEEKLY TOTAL OF RAIN. That's done. What do I do now?

Here comes the work. When you can, each morning check your HI/LO at about 6 a.m. and write it on your record sheet. Record both the last 24-hour HIGH temperature and the 24-hour LOW temperature from your thermometer and then reset it. Next, walk out on your lawn and check the rain gauge for any precip which may have fallen in the last 24 hours and write than on your chart, too. Make sure you dump the gauge after you read the total.

Got your figures ready? Good. Now, assign a message number to the data. Some folks use the day's date as a message number. For example, a message taken on July 10 would be message #10. Some folks are really cute and use the whole date as the message number - using the above example, it would be message number 710 or message number 7.10. Use whatever works the best for you.

So, come callup time for the Badger Weather Net. When the net control station asks for stations with weather to report, say, "Net control, this is W9XYZA with one weather from Anywhere, Wisconsin." He will acknowledge you and say, "Please call W9RCW and pass your weather report."

W9XYZA says, "My message number 10 from Anywhere, Wisconsin. HIGH 87 LOW 50 PRECIP 0 73."

That's it! Difficult. Not! Reward? Fantastic. The National Weather Service doesn't just accumulate this data and discard it to the round file. Fact, according to Rudy Schaar, NWS, "The hydrologists are lost without this data provided by Amateur Radio stations, and we need more help!"

You do not have to report each and every day. But it works best if you can. The NWS needs a degree of consistency.

Bottom line: Think about it, please. If you are interested, please give me a call on the air or drop me an email message. The BWN is the elite of weather recording and reporting nets in the country. There are other states which are modeling *their* programs after ours. This net is only as good as its reporting stations, and we can sure use your help to gather more data!

What else do you need to know to come on board?

WANTED

Salesperson to sell tools at Hamfests for me Saturdays and Sundays. Good pay. Lots of traveling. Chicago Surplus, Trevor, Wisconsin. Call: Gabby, (414) 862-2517 9-5 p.m. FAX: (414) 862-6376.

Wisconsin Amateur Internet Addresses

CALL	NAME	CITY	E-MAIL/URL
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WA9YVE	John Givens	Ixonia	wa9yve@globaldialog.com
WB9ZBE	Donna Menart	Howards Grove	dmenart@excel.net
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K9ZZ	Jim Romelfanger	Baraboo	smokesigs@baraboo.com
Black River Wireless Assn.			liljim@badger.tds.net
Central Wisconsin Radio Amateurs		Stevens Point	www.coredcs.com/~maciden/cwra.htm
Chippewa Valley ARES		Eau Claire	kg9mv@ecol.net
Dane Co. ARES			www.danenet.wicp.org/~ares
ECResources, Ltd.			www.execpc.com/~kf9cs/ecr.htm
Eau Claire Amateur Radio Club			kg9mv@ecol.net
		www.ecarc.org	
Fox Cities Amateur Radio Club W9ZL		Appleton	http://w9zl.ampr.org
Madison Amateur Radio Clubs		Madison	http://members.aol.com/staskc2ak/
Marquette/Menominee ARC			mmarclub@hotmail.com
			www.cybrzn.com/~grizzly/mmarclub/
Marshfield Area ARS		Marshfield	waltfriant@tzn.net
Milwaukee Area SKYWARN Association		Milwaukee	svoros@execpc.com
			www.execpc.com/~svoros
Milwaukee Area Amateur Radio Society		Milwaukee	www.execpc.com/~n9lkh
Morse 2000 Project		Eau Claire	www.uwec.edu/Academic/Outreach/
			Morse2000/morse2000.html
Near Space Sciences			http://tbcnet.com/~davidc/nss/nss.html
Ozaukee Radio Club			www.execpc.com/~theliman/Ozaukee.html
Racine Megacycle Club		Racine	w9udu@wi.net
			www2.wi.net/~hamradio/
Red Cedar Repeater Association			http://discover-net.net/~tazman/
			rcrainfo/rcrainfo.html
Rib Mountain Repeater Assn.		Wausau	nelles@dwave.net
Riverland Amateur Radio Club		La Crosse	www.centuryinter.net/rarc/
UW Space Place Amateur Radio Center		Madison	www.sal.wisc.edu/spaceplace
Washington County ARC			www.nconnect.net/~wcarc
Watertown Amateur Radio Club		Watertown	wa9yve@globaldialog.com
West Allis Radio Amateur Club			wa9pov@execpc.com
			www.execpc.com/~wa9pov/warac.html
Wisconsin Association of Repeaters			n9uur@execpc.com
			www.gmicom.com/war
Wisconsin Emergency Management EOC		Madison	RACES@DMA.STATE.WI.US
Yellow Thunder ARC		Baraboo	www.theliorax.com/~sschulze

Updated 07/17/98 - Complete listing

Note that e-mail addresses and Web URLs may be case sensitive.
Send additions and changes to wa9pov@execpc.com.
This list is also available at www.execpc.com/~wa9pov/bsslist.html.

SAREX won't be flying on John Glenn shuttle flight

NASA has scuttled plans to include the Space Amateur Radio Experiment (SAREX) payload aboard STS-95 this fall. That's the flight that will carry US Senator and astronaut John Glenn into space. Five schools, four in the US and one in Japan, had been tentatively lined up for Amateur Radio schedules to talk with the shuttle crew during the highly publicized October mission. Glenn, the first astronaut to orbit Earth, will be 77 when he returns to space later this year.

NASA flight managers also removed nine other "secondary" payloads because of time constraints on the already-busy mission. NASA expressed regret at having to drop the educational SAREX payload.

Two hams—US Astronaut Scott Parazynski, KC5RSY, and European Space Agency astronaut Pedro Duque, KC5RGG, of Spain—will be among the international crew aboard STS-95.

"We're really disappointed," said ARRL Educational Activities Department Manager and SAREX Working Group Member Rosalie White, WA1STO. The Glenn flight had generated a good deal of enthusiasm within the ham radio community. Schools to be included had only recently been notified that they would be on the list. White said the US schools now will be first in line for consideration on future missions, such as STS-93 early next year and the International Space Station.

Future shuttle missions are heavily loaded with activities involving construction of the ISS. Eileen Collins, KD5EDS, the commander of STS-93, is said to be enthusiastic about the possibility of including SAREX on her flight. Amateur Radio also is an official payload aboard the International Space Station.

The ARRL Letter, 7/10/98

Working all Wisconsin Sesquicentennial special event stations - and more!

By Stan Farley, N0ABA
8955 N. Janis
Valley Center, Kansas 67147

I have been very interested in special event stations for as long as I have been involved in ham radio. But working the Wisconsin Sesquicentennial operations proved to be the most enjoyable special event activity ever. I learned of these stations thanks to the *Badger State Smoke Signals*, and Joe Larson, N9JW, of Stevens Point.

Joe kindly provided me with the details for these six operations:

W9S (Madison) May 2-10
W9I (Green Bay) May 22-30
W9B (Belmont) May 29-31
W9W (45/90) May 29-30
W9A (Adams County) June 20
W9W (Oshkosh) July 1-5

Along the way I would run into two other excellent Wisconsin special event efforts:

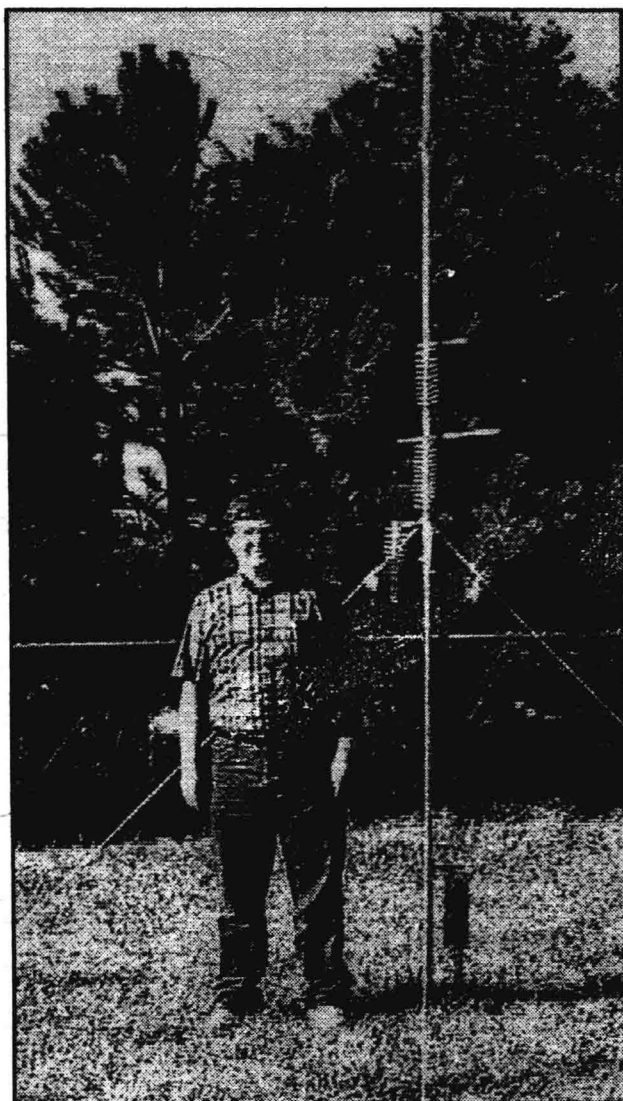
W9CUS (Milwaukee) May 29
W9S (Oshkosh) July 4

All contacts would be on SSB, with exactly half on 40 meters and half on 20. The typical signal report I received was about 5-by-5, which isn't too surprising at this distance, and considering I only run about 100 watts to a vertical. I was happy just to get in the log!

My plan to work all of the six stations on my original list almost ended with the first operation, W9S in Madison. I did not hear W9S until May 9, and since it was evening local time, it was a bit of a miracle that I could make the trip between Kansas and Wisconsin on 20 meters at all. But fortunately for me, Mary, the W9S operator at the time, was able to pull my signal out of the noise.

I was able to work W9I, with Keith at the mike, on 40 SSB. I would hear W9I in Green Bay many times before their operation ended. A few days later, I found W9B in Belmont, with John as the operator on 20 SSB. Shortly after that I was pleasantly surprised to find Ron and the W9CUS special event station from Milwaukee.

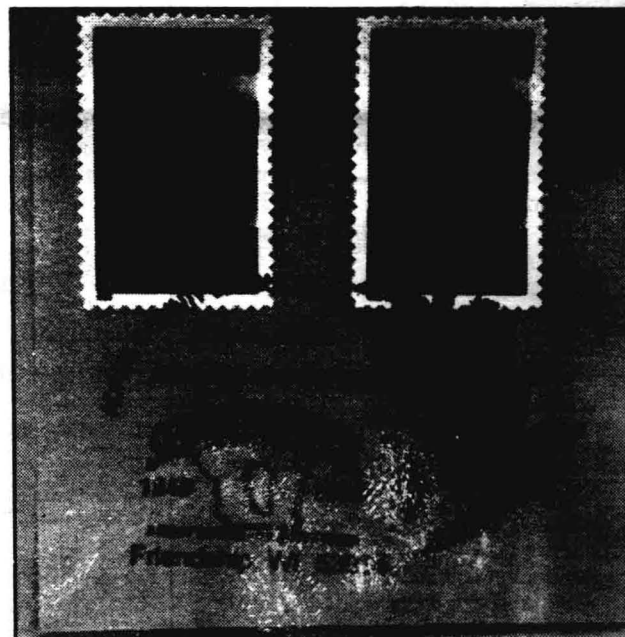
By this time I was really on a roll, and I started seriously thinking that I might actually work all of the Wisconsin Sesquicentennial stations. But, contacting



Stan stands in his yard, next to the vertical antenna.

W9W at the Poniatowski 45/90 marker proved to be quite a task.

I listened to them on 20 for a couple of hours during their first evening of operation, but their signal was very light here, and I knew they would not be able to copy me. And after watching the Wisconsin map on the Weather Channel that night, I wouldn't have blamed the W9W crew if they had packed up and gone home early. On Saturday, I found them again on 20, but conditions between us were still not good. If only I could have been a few hundred miles farther away, there would have been



Adams County's certificates were mailed with a special cancellation.

Photos by Stan, N0ABA, and Kathy, KB0RVH

no problem at all. But I was very persistent, and suddenly at 2000Z, W9W jumped to over S9 on my meter and Don heard me just fine. A little while later, the signal dropped back down to barely audible. Another close call!

Next was a very long wait of three weeks until W9A from Adams County. I found Jim on 40 meters early on Saturday, June 20. After another couple of weeks with no special event activity, I found Jeff operating W9W at the Sawdust Days Festival.

And on the 4th of July, I was pleasantly surprised to find Dick operating W9S from Oshkosh.

WOW!! I had actually "worked 'em all"! And beautiful certificates and QSL cards soon started arriving in my mailbox. There was a very interesting 4th of July postmark from Adams County on the envelope for my W9A certificate and card.

At the time of this writing, I have received certificates and cards from W9A, W9I, W9W, W9CUS, and W9S (Oshkosh). All are very nicely done and I very much appreciate the efforts of all the people involved in the Wisconsin Sesquicentennial Special Event Stations.

And again, my thanks to the *Badger State Smoke Signals*, and to Joe, N9JW, for their help in making this possible.

PARTICIPATING CLUBS AND ORGANIZATIONS



Washington County Amateur Radio Club

Tom Waldschmidt, N9LZW,
Secretary
465 Elder Lane
Allenton, WI 53002-9799



Club Repeater: 146.73 MHz

<http://www.nconnect.net/~WCARC>

MEETING MINUTES July 9, 1998

The July 9, 1998 meeting of the Washington County ARC was called to order at 7:30 p.m. by President Paul (Rip) Ripple, W9SIZ. There were six members attending. They were Tom, N9LZW; Bill, N9IBU; Abe, KG9LO; Sherm, W9NGT; Don, K9GR; and Paul, W9SIZ.

The minutes of the June meeting were read by Secretary Tom, N9LZW. There was a motion by Abe, KG9LO, seconded by Bill, N9IBU, to approve the minutes. Motion carried.

The treasurer's report, which was prepared by Treasurer Dave Parkinson, KA9RNU, was read by Secretary Tom, N9LZW. There was a motion by Sherm, W9NGT, seconded by Bill, N9IBU, to accept the treasurer's report. Motion carried. Those present had many favorable comments about the treasurer's reports that Dave provides.

FIELD DAY REPORT

Sherm, W9NGT, stated that Don, K9GR, deserves a resolution for the many hours he put in on Field Day operation. Thanks to Don for all his work, keying, and logging. Sherm, W9NGT, said that every time he looked Don was at the rig working.

Don, K9GR, said he would like to thank Andy, KB9UE, for copying the ARRL Field Day message for the club and everyone who supported the Field Day operation.

Sherm, W9NGT, said that we should thank the St. Lawrence Fire Department for providing a blower when it was so muggy. Don, K9GR, said that it dried out the water, cooled the operators, and kept the bugs away. Don asked the secretary to write a short letter to the chief thanking the department for use of the facility and for providing the blower. Don, K9GR, reported that the antenna system worked beautifully. He said that there were barely any stations that he could hear that he couldn't work.

CORRESPONDENCE

Tom, N9LZW, said that the only correspondence was an offering for magazine subscriptions.

REPEATER COMMITTEE REPORT

Don, K9GR, the Repeater Committee Chairman reported that the repeater has been working fine.

Rip said that he hears the DeKalb, IL repeater blasting in all the time. There was some discussion about the two systems and their use of PL.

NEW BUSINESS

Don, K9GR, questioned whether there were plans for a club picnic. He said that it has always been held in August in past years. Tom, N9LZW, said that Larry, WB9BVB, had suggested Heritage Trails County Park on CTH E as a nice location for the picnic. Rip, W9SIZ, said he would try to contact Larry regarding it.

Rip, W9SIZ, said that we should postpone the program, "Five Questions About Your Ham Radio Interests", until the next meeting.

There was a motion by Bill, N9IBU, seconded by Abe, KG9LO, to adjourn the meeting. Motion carried.

Respectfully submitted:
Tom, N9LZW, Secretary

After the meeting, Bill, N9IBU, showed us a new style of fanny pack available from Radio Shack. It is designed to hold your HT and spare battery among other things and costs just \$15.00.

There was further discussion on a variety of other topics.

CALENDAR OF EVENTS

08/01/98 9:00 a.m. club breakfast, Mine-shaft in Hartford

08/06/98 7:30 p.m. Net, 146.730

08/08/98 9:00 a.m. club breakfast, Jimmy's in Jackson

08/13/98 7:30 p.m. WCARC Meeting, Courthouse, West Bend

08/15/98 9:00 a.m. club breakfast, Mine-shaft in Hartford

08/15/98 11:00 a.m. Annual Club Picnic, Heritage Trails County Park on CTH E 1/4 mile West of CTH J. This is just a few miles South of Slinger.

08/20/98 7:30 p.m. Net, 146.730

08/22/98 9:00 a.m. club breakfast, Jimmy's in Jackson

08/27/98 7:30 p.m. Net, 146.730

08/29/98 9:00 a.m. club breakfast, Mine-shaft in Hartford



SHEBOYGAN County Amateur Radio Club

Mike Musiel, KF9SJ, Secretary
N9001 Dairyland Dr., Cleveland WI 53015

The July meeting of the Sheboygan County Amateur Radio Club was called to order by Vice-President Larry, WB9FXQ, at 7 p.m. local time.

There were 7 members present at the meeting. The SCARC meets every second Tuesday of the month at the Red Cross building, 2032 Erie Ave., Sheboygan.

The treasurer's report was given, showing that there was \$1158.67 in the checking account, \$80 of which is for the Red Cross building donation. Steve, N9TRK, also reminded us that the money for the Red Cross donation is needed very soon.

Several members inquired about the 8 a.m. breakfast schedule. It is as follows:

1st Saturday of the month, Jumes in Sheboygan.

2nd Saturday of the month, Family Restaurant in Cleveland.

3rd Saturday of the month, Jumes in Sheboygan.

4th Saturday of the month, The Point, in Sheboygan Falls.

Due to a falling number of check-ins, changing the Monday night 2 meter net to a later time, possibly 7:30 or 8 p.m. was brought up. It will be discussed on the net next Monday night. Also Mike, K9SJ, discussed running the R.A.I.N. Report before the Monday net.

The January membership meeting will be held on the 147.06 repeater, 7 p.m. on the 2nd Tuesday.

Two upcoming local events we are involved in are the Leukemia 150 in July and the Old Plank Road Trail Health Classic. Mike, K9SJ, says we need at least 4 more people to operate the 3 check points needed for the leukemia event. The 444.100 repeater will be used for coverage.

The Old Plank Road Trail Health Classic is scheduled for September 12. Again, we need at least 6 operators for 3 check points.

Mike, K9SJ, commented that the ARES nets are involving more operators each week. The only other comment was that it is very important to limit your

transmissions to "reportable" information.

Although the club did not have a Field Day, station several members ran their own stations. Steve, N9TRK, really took the day to heart. He packed up his gear and the family and drove to Iowa for a family reunion/field day weekend. With his Ten-Tec Scout, dipole and a fishing rod he was able to work 80 stations on 4 bands and still make the reunion.

Upcoming club meeting programs include:

August- K9SJ- soldering demonstration

September- N9TRK- F.I.S.T. CW club, "accuracy before speed"

October- K9SJ- TNC kit building

Finally, we need to find a "temporary" home for the club station equipment while the remodeling is being done.

We wish a speedy recovery to Lee, N9YLS. Lee was involved in a car versus motorcycle accident two weeks ago.

Thanks to Larry, WB9FXQ, for the refreshments.

Meeting was adjourned at 7:55 p.m.

Just a reminder, if you use e-mail, consider signing up to the Sheboygan Hams mailing list. Just submit your e-mail address to: julian@bongo.tele.com. E-mail sent to shebham@tele.com will be forwarded to all listed subscribers. Thanks again to N6ARE for providing the mail server for SCARC and ARES use.

Net Schedules

7 p.m. Monday nights, SCARC Fun Net, 147.06 PL 107.2, +.

Traders Net - Following the Monday night net on the first Monday of each month.

6:30 p.m. Thursday night, ARES Net, 147.06 PL 107.2, + and 444.175 PL 107.2 +.

10 Meter Net, Monday nights following the 2 meter net, 28.350 USB.

Respectfully submitted:
Steve Eisold, AA9SJ

FCC SEQUENTIAL CALLSIGN UPDATE

The following is a list of FCC sequentially assigned call signs issued as of July 1, 1998. For more information about the sequential call sign system, see Fact Sheet PR5000 #206S or contact the FCC, 1270 Fairfield Rd, Gettysburg, PA 17325-7245; e-mail fccitd@fcc.gov.

District	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
0	AB0HT	KI0NM	++	KC0DUO
1	AA1TW	KE1JX	++	KB1CZO
2	AB2FK	KG2OP	++	KC2DUP
3	AA3RD	KF3BW	++	KB3CUH
4	AF4KO	KU4TF	++	KF4ZDA
5	AC5QQ	KM5RK	++	KD5EQG
6	AD6FS	KQ6WW	++	KF6RUG
7	AB7YI	KK7ON	++	KD7CEU
8	AB8CW	KI8GG	++	KC8KOH
9	AA9WD	KG9OA	++	KB9TCB
N. Mariana Is	NH0E	AH0BA	KH0HE	WH0ABJ
Guam	++	AH2DH	KH2TL	WH2ANX
Hawaii	NH7I	AH6PM	KH7JZ	WH6DER
American Samoa	AH8R	AH8AH	KH8DM	WH8ABF
Alaska	AL0L	AL7RD	KL0PG	WL7CUU
Virgin Islands	++	KP2CN	NP2KD	WP2AIJ
Puerto Rico	NP3Y	KP3BI	NP3XG	WP4NNT

++ All call signs in this group have been issued in this district.

Wisconsin Valley Radio Association

Kim Kunze, N9SDL, Secretary

P.O. Box 363 • Wausau, WI 54402

Six Meter Repeater: 51.19 Input/52.89 Output

The Wisconsin Valley Radio Association's minutes do not appear this month. The club had a picnic, which was the unofficial meeting. WVRA will be back, bright-eyed and bushy-tailed in our next issue.

The Racine Megacycle Club



Club Station W9UDU • Racine, WI
ARRL Affiliated

Providing Communications for American Red Cross and ARES
Mary Urban, N9ZWE, Secretary

c/o RMC • P. O. Box 3 • Racine, WI 53401-0003

e-mail: w9udu@wi.net • Web: http://www2.wi.net/~hamradio/

MEETING MINUTES June 8, 1998

A SPECIAL MEETING of the membership was held at the American Red Cross Building. The meeting opened at 7:30 p.m. for the purpose of voting on amendments to the corporation's Articles of Incorporation. President Rees Roberts, K9UUT, and Secretary Mary Urban, N9ZWE, were present.

Vice President Bob Burgermeister, W9EH, explained the rules of the special meeting. Bob, W9EH, entertained a motion to accept the proposed changes to the articles of incorporation. Dennis, K9DAD, moved to accept the motion. The motion was seconded. Mary, N9ZWE, voted 44 yes proxies and 8 members in person voted yes. There were 74 eligible votes and a 2/3 vote was required. The motion carried.

Paul, N9RGW, made a motion to adjourn the special meeting at 7:36 p.m. The motion was seconded and approved.

The regular membership meeting was opened at 7:37 p.m. by President Rees Roberts, K9UUT.

Secretary Mary, N9ZWE, read the minutes of the May 11, 1998 meeting. Ken, N9WHR, made a motion to accept the minutes as read. The motion was seconded and approved.

Treasurer Dave, AA9HL, read the treasurer's report. The *Badger Smoke Signals* cashed a check for \$66.64 from 1991. Ken, N9WHR, made a motion to accept the report as read. The motion was seconded and approved.

Rees, K9UUT, discussed a letter from the IRS reprimanding the club for not changing our articles of incorporation within the time allotted. We have been advised by our contact person at the IRS to disregard the letter. He also received a letter from Lloyd, WB9RGO, announcing his resignation as Emergency Coordinator for Racine and Racine County.

Education Committee Chairman Larry, WA9JMO, requested help in setting up a class in September. Arne, KA9ZPY,

made a motion that the participants of the Education Committee will get their dues waived for the next year. The motion was seconded and approved.

Hamfest Committee Chairman requested a meeting of the committee following the membership meeting. Dan, KA9OIL, announced the next Racine Megacycle Club Hidden Transmitter Hunt on June 19.

OLD BUSINESS

Mary, N9ZWE, read a letter from Racine Lutheran High School thanking the club for participating in their walk-a-thon.

A membership E-mail address list is available and she would like the e-mail address of anyone who is not already listed.

Bob, W9EH, gave an update on the 440 band issue.

NEW BUSINESS

A suggestion was made and accepted that Lloyd, WB9RGO, be presented a certificate of thank you for his years of service.

A new member questioned the dues structure and the fact that he had been offered free membership as a class incentive. Larry, WA9JMO, made a motion that dues of new members who join mid year would include the following year's membership. The motion was seconded. Mary, N9ZWE, read the portion of the by-laws that states the club dues are to be prorated. The by-laws prevail and Rees, K9UUT, moved to table the motion. It was seconded and approved. Mary, N9ZWE, checked the minutes of previous meetings and found that no motion had been approved to waive the dues of the class members.

Ken, N9WHR, made a motion to adjourn the meeting at 8:40 p.m. The motion was seconded and approved.

Bob, W9EH, gave a demonstration of the logging program to be used at Field Day. Laptops were available to practice logging.

Quarter Century Wireless Association Southeastern Wisconsin Chapter 162

Larry McCalvy, WA9JMO
5400 Six Mile Road
Racine, WI 53402



The Greater Southeastern Wisconsin Amateur Radio Recognition Banquet will be held on Saturday, September 26, 1998 at the Charcoal Grill and Rotisserie Restaurant (formerly Ensenadas), 8300 Washington Avenue (Hwy 20) in Racine. Registration at the door begins at 5:30 pm, dinner will be served at 6:45 p.m. and the program will kick off at 8 p.m. Flyers have been sent to all Lakeshore Repeater members. We will continue dispersing flyers at all up coming ham functions and will mail one to those requesting this service.

The sit down dinners include a half Rotisserie Chicken (\$14.00), a Fresh Backed Whitefish (\$16.76), and a Surf and Turf (\$20.25). Reservations may be sent to Bob Jensen, W0WLN, 5616 Cambridge Lane, Unit #6, Racine, WI 53406-2870. Include your name, call, address, phone number, the name(s) of your guest(s), and a check to cover the cost of the meals. Make the check out to QCWA, Chapter 162 and mail it to Bob.

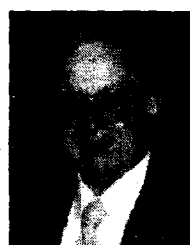
The awards associated with this function are generated from the written nominations you sent to the Awards Committee. Two of the standing Recognition Awards are the "Ham of the Year" and the "Olie

Fox Award of Excellence" plaques. The criteria for each is as follows: The Ham of the Year nominations can be for any licensed Amateur living in the Greater Southeastern Wisconsin area. This includes Northeastern Illinois. The ham must have contributed significantly to Amateur Radio and his or her community. The nomination(s) must be in writing detailing why the individual was nominated. Nominations for the Olie Fox Award of Excellence are similar, with the exception being that the individual nominated must have first been licensed 25-years prior to receiving the award. Nominations for either award may be mailed to the Awards Chairman, Larry McCalvy, WA9JMO, 5400 Six Mile Road, Racine, WI 53402-9741.

This would also be the most appropriate time to recognize other deserving hams with a serious or humorous presentation. Let your imagination run wild!

Although Field Day 1998 has moved into history, to be visited from time to time as its participants verbalize some of its more memorable "facts", there does remain the outing's "score" to report.

Please turn to page 12



Notes From the Section Manager

Roy Pedersen, K9FHI • 510 Park Street
Juneau, WI 53039



ARRL needs more new members and renewals, let's each one of us get a new member and that member get a new one, let's get the ball rolling.

KB9ROJ is now KG9NX (Extra).

Mary and Mike Eiden upgraded. Mary, KA9FAS, has Generals, Mike WD9JID has Extra. Dave Tamres, KB9-IIF, has general.

Tri-County swapfest March 21, 1999.

WA2 (sic), K6NA, G3SXW and N2AA have been inducted into the CQ contest hall of fame, at the Dayton Hamvention.

According to annual statistics by IARU there were 2,777,000 Amateur Radio operators in the world.

I regret to report the following Silent Keys: W9RKL, W9QHI and W9HDG.

There were 43 attending the June meeting of QCWA Chapter 55; Fred Lynn W9NZF 65 years as a ham, Duane Haas W9BCV 66 years as a ham, quite an achievement.

I hope everyone wrote their congressman, senators and sent five copies of your letter of bill RM 9267 to the FCC. We don't want to lose any more frequencies.

I need more information from you people for the column in *QST*, please.

The ability to speak in several languages is an asset, but the ability to keep your mouth shut in one language is priceless.

Wisconsin Nets Association Ltd.

Art Evans, KA9KLZ, Secretary
213 N. Jefferson • Cuba City WI 53807-1558

WISCONSIN NETS

Net	WNA	Freq.	UTC	CDT	Manager
BWN	Yes	3985	1200	0700	W9RCW
BEN	Yes	3985	1800	1300	KE9VU
WSBN	Yes	3985	2330	1830	K9UTQ
WNN	Yes	3723	0000	1700	K89CZ
WSSN	Yes	3645	0030	1930	N9BDL
WIN/E	Yes	3662	0100	2000	WB9ICH
WIN/L	Yes	3662	0400	2300	W9UW
RCRA	No	01/61 (Mondays CDT)	0030 (Menomonie Area)	1930	KA9OMC
Gr. Bay	No	72/12 (Green Bay Area)	0245	2145	WB9NRK
ARES	No	4.65/5.25 (South East/South Central Wisconsin)	0200	2100	
RACES	No	3993.5 (LSB Sunday)	1400	0900	WA9OAY

WISCONSIN NTS TRAFFIC REPORT June 1998

With the advent of warm weather and many outdoor activities, June brought a decrease in both traffic and check ins on the Wisconsin nets. With all nets reporting, 3091 stations passed 2008 messages during the month of June. BWN/1615, BEN/116, WSBN/81, WNN/22, WSSN/20, WIN-E/117, and WIN-L/37.

Nine stations had traffic totals in excess of 100, three of whom made Brass Pounder League. The stations are: K9JPS/1146 (BPL), W9RCW/1047 (BPL), WB9JSW/518 (BPL), W9CBE/457, K9GU/392, WB9YPY/277, K9RTB/199, N9KHD/154 and N9CK/104. Twenty nine stations submitted Station Activity Reports, and twelve stations submitted Public Service Honor Roll Reports.

During the summer months, many people are engaged in other activities besides Amateur Radio. Therefore some net control stations and 9th region liaison stations will miss nets. When this happens,

pick up the net or offer to go to 9th region. Don't let the net slide.

I mail my reports to League Headquarters on the 7th of the month. That makes the deadline for reports the 6th. I can accept reports until I start printing them up for mailing.

If you can catch me on the BWN on the morning of the 7th all would be well.

Hale Blakely, W9CBE, Asst. STM will also accept reports and forward them to me. Hale covers most of the CW and SSB nets so there is someone on almost every net to take reports.

Reports can also be sent VIA packet or e-mail.

My packet address is: KA9KLZ @ KC9KQ.WI.USA.NOAM

My e-mail address is: aevans@mhtc.net

Thanks to all stations who participate in the Wisconsin nets. You are the nets and Wisconsin nets are the best. 73.

Submitted by:
Arthur A. Evans, KA9KLZ
Wisconsin Section Traffic Manager

Taylor County Area Amateur Radio Club

Tom Hrdina, N9GEN, President

2373 Willow Avenue • Medford WI 54451

MEETING ANNOUNCEMENT

The next regular meeting will be held on Thursday, August 13th. PLEASE NOTE the change in the date from the usual first Thursday meeting! This will be the club's summer picnic and will start at approximately 6 p.m. at the home of Roland Sacho, N9UBQ, N2302 Sunset Drive, Medford.

DIRECTIONS: From the intersection of Hwys. 13 and 64 go west of Medford to Sports Page (CTH Q); south about 1 1/2 mi. to CTH O; west 2 mi. to Sunset Drive; south 1/4 mile on the east side. OR from the intersection of CTH O and CTH E, 1 mile east and 1/4 mi. south. Directions/talk-in can also be obtained on the

Continued on page 12

Taylor County Area Amateur Radio Club

Continued from page 11

147.15 (+600 kHz) Medford repeater. Spouses and significant others are also invited. The picnic is open to ALL Taylor County area Amateur radio operators, whether or not you are a member of the club. It will be an opportunity for fellowship and socializing. You should bring your own meat for the grill, your own beverages, and a dish to pass. There will also be a SHORT business meeting, replacing the regular monthly club meeting for August.

CLARK/TAYLOR COUNTY AMATEUR RADIO EMERGENCY SERVICE (ARES) NEWS

Mike Schoenhaus, N9GHZ
ARES Emergency Coordinator

Don't forget to try to check into the

weekly ARES net held Wednesdays at 8:30 p.m. on the Medford repeater (147.75/147.15). If the repeater is down or not functioning properly, alternate frequencies, in order, are 147.15 MHz simplex and 146.52 MHz simplex. You're also encouraged to volunteer for net control duty for the net.

OTHER NEWS

- We are sorry to report that Ray Bohnert, W9QHI, of Medford, WI, became a silent key on June 28th at the age of 72. Ray had been an engineer at Radio Station WIGM/WKEB in Medford for 48 years, starting in 1943 and retiring in 1991. He became a co-owner of the station in 1955. He had also been active in the Medford Boy Scouts organization. Ray was a long-time member of the Taylor County Area Amateur Radio Club and had served as trustee of the 147.15 Medford repeater for a period of time.

- The Taylor County Area Amateur Radio Club recently donated new, updated copies of the ARRL's "Now You're Talking! All You Need To Get Your Ham Radio Technician License" to the public libraries located in Medford, Rib Lake and Gilman, all in Taylor County. □

Red Cedar Repeater Association, Inc.

Steve Hart, KA9OMC, Secretary

E616 810th Avenue

Knapp, WI 54749

2 Meter Repeater: 146.01 Input/146.61 Output

Greetings, RCRA sponsors and guests.

Get-well wishes to WB9OKQ, Lyle Miller, at Star Prairie, and W9QAH, Bruce Walther, at Stevens Point, on their recent surgeries.

Please make welcome new sponsor N9LIK, Earl Ladendorf, at New Auburn. Earl worked for WMAQ in Chicago for many years.

Our many thanks to all who donated items for our sales at the Eau Claire Amateur Radio Club Hamfest. We raised nearly \$300, and came close to selling out the recent estate items that were consigned.

KB9SGY, David Garnett, and N9FVA, Chuck Thomas, both purchased HTs at the EC Hamfest. KB9NIR, Scott Kilde, found some relays he needed.

K9IAG, Ken Drake, at Menomonie, has for sale a Kenwood TS-530. Call Ken at (715) 235-3104.

N9PPE, Jeff Cole, recently visited his relation in Washington, D.C. Jeff says "Be prepared to do a lot of walking" when touring D.C.

WB9PMF, Tim Rose, at Chippewa Falls, is lending a hand to our repeater director, NQ9X, Ed Van Sickle, at Whitehall on some antenna work.

The repeater has for sale a mint Swan 500CX HF transceiver with mike and power supply. Call (715) 665-2374. Pick up item only.

KB9TAC, Andy Wagner, recently helped his father John put in a complete new mound septic system after the former one failed.

NX9F, Jim Ley, at Menomonie, reminds us that the annual Tinman Triathlon will be August 29. Contact Jim at (715) 235-3998.

Remember our Saturday morning get-togethers at Hardee's in North Menomonie at 9 a.m.

See you on the Monday night net at 6:30 p.m.

Steve Hart, KA9OMC
Secretary/Treasurer, RCRA

OFFICIAL PUBLICATION OF CENTRAL WISCONSIN RADIO AMATEURS, LTD.

At University of Wisconsin, Stevens Point

WATTS SNOO



WB9QFW 2-Meter Repeater 146.07-.67 and Club Station

249 Georgia Street North • Stevens Point WI 54481-1040

The Central Wisconsin Radio Amateurs did not meet in July. They'll be represented here once again in our September issue. Thanks to Al Mallek, N9WBS, secretary.

Have you considered becoming an ARRL Volunteer Examiner?

ARRL VEC

If you are 18 or older, and are presently a General, Advanced, or Extra class licensee, the ARRL/VEC would be glad to hear from you. Feel free to contact the ARRL/VEC at (800) 927-7583 and request our Prospective VE Packet. Very 73 to all my friends in Wisconsin!

Bart Jahnke, W9JJ/1 • ARRL/VEC Manager

QCWA Southeastern Wisconsin Chapter 162

Continued from page 11

Chapter 162, operating with the club call K9AKG, totaled 1630 points. K9AKG logged 73 CW and 60 phone contacts, all QRP for a sub-total of 1030 points. There were 300 points gleaned from 100% emergency power, 100 points for copying W1AW's Field Message, 100 points for five contacts using natural power, and another 100 for having a visitor log on site.

The Chapter only operated during daylight hours and were in their beds fast asleep when the storm passed through about midnight.

Marcy (Chuck, W9GKM) Knotek is recuperating from lower back disc-fusing surgery. An old problem flared up and demanded a permanent solution. Chuck tells us Marcy is up, walking and experiencing daily improvements. Great news Marcy, hope to see you at the picnic!

Ellanora (Herb, W9PHJ) Ladwig has been subjected to a multitude of tests since her fall late last year in an attempt to locate the problem(s). The test results were negative in almost all cases. At this writing, Ellanora is at the Washington Manor Nursing Facility in Kenosha. The stay seems beneficial. Herb tells me Ellanora's blood pressure has been stabilized in the normal range and the constant 24-

hour per day professional care has shown a marked improvement in her mental as well as physical being. One kidney has stopped functioning and the other is operating only minimally. Ellanora will enter a dialysis program to enhance the kidney's functions. Once that is brought under control, there is a gall bladder problem to deal with. With all that, Herb tells me Ellanora is in good spirits, and they are spending some quality time together. All our prayers are with you, Ellanora, for a speedy recovery.

President Spencer Clope, W9LDH, tells me he (with some help) has finally resolved the dilemma with his packet station. He has corrected the date from 2 August 1998 to the present (I don't know how, and maybe Spence doesn't either) on his out going messages (and I thought only I had that problem!).

Our picnic is upon us! Sunday, August 16, 1998, from 1 to 5 p.m. at Decision Farm, 5400 Six Mile Road, Racine (one half mile west of Hwy 31 on Hwy "G" — "G" and Six Mile run together past the farm). The club will supply the soft drinks and watermelon; WA9JMO and N9PAC will provide the grills (2 gas and 1 large charcoal) and roasted corn. Each attendee is asked to bring a dish to pass and their own meat to grill. We are looking forward to a wonderful day. Bring your fishing poles; yes Fern, the fish are biting. There are eight-inch-long, half-pound Blue Gills just begging to be caught!

73, Larry McCahy, WA9JMO

1998 Newsline young ham of the year to share his award with childrens aid group

A sixteen-year-old from Edgewater, Florida, has surprised the ham radio community by donating part of his award as *Newsline* Young Ham of the Year to the 'Make A Wish Foundation.' Richard Paczkowski, Jr., (ham radio callsign KP4BIA), of Edgewater, Florida, says that he donated his week at Spacecamp Huntsville to the organization so that a less fortunate youngster can enjoy his or her dream:

"What I would like to do, if possible, would be to donate my week at Spacecamp to the 'Make a Wish Foundation.' As you know, children with life threatening illnesses are signed up with the organization and 'Make a Wish' tries to make their wish come true," said Paczkowski.

He went on to say: "I am sure that there is a little kid, somewhere, that really wants to go to Spacecamp. It would give me a lot more joy to know that there is one little kid out there for whom going to Spacecamp is his great wish, and have it come true."

The week at Spacecamp is a part of the Young Ham of the Year Award underwritten by *CQ Magazine* of Hicksville New York. *CQ's* Advertising Manager Arnie Sposato (N2IQO), says that he is very impressed by Richard's generosity:

"It's really such a nice gesture and very commendable on his part to make such an offer. It is a wonderful thing that Richard is doing."

Also delighted by Richard's generosity was Yaesu USA's Director of Sales and Marketing, Kevin Karamanos (WD6DIH). Yaesu is another of the 'Young Ham of the Year Award' corporate sponsors. Karamanos believes that Paczkowski has set a new standard for those who will follow:

"I should not be shocked because of the caliber of people who are selected to receive this award, it's only that I have never heard of anyone doing this, and, it is such a great idea. It's just super!"

Richard Paczkowski Jr., was named the 1998 "Young Ham of the Year," based on his four-year amateur radio career that has been dedicated almost exclusively to public service work. This, includes organizing local county communications support during the recent Florida wildfires.

In her letter nominating Richard for the award, Patricia White, N6LKC/4, stated: "This young man deserves this award because of his outstanding dedication in serving his community at times of need and distress...With his active and 'beyond the call of duty' attributes, he has successfully and honorably used Amateur Radio in the light with which it was meant to shine...This fine young man is the representation of what amateur radio is all about and was meant to be."

Richard Paczkowski Jr.'s decision to donate his trip to Spacecamp to a seriously ill child more than reinforces Mrs. White's words. It shows him to be a young man of compassion for, and understanding of, the needs of those less fortunate.

Says Young Ham of the Year Award Administrator, Bill Pasternak, WA6ITF, of the *Amateur Radio Newsline*:

"In my humble opinion, Richard Paczkowski, Jr., KP4BIA, is really what this hobby and service we call amateur radio is really all about. It is people caring about other people whom they might not know, but to whom they have pledged their talent as trained communicators. Richard takes that a giant step further by adding his own very personal touch."

Richard Paczkowski, Jr. (KP4BIA), will receive his award the evening of August 15th, 1998 at the Huntsville Hamfest in Huntsville, Alabama.

• Thanks ARRL, *Newsline*

The other shoe: hams await FCC'S "streamlining" plan

Nearly lost in the maelstrom of discussion over the ARRL Board's plan to restructure Amateur Radio licensing is the fact that the FCC soon plans to make its own "streamlining" proposals public. Release of the FCC proposals could come within the next few weeks.

At a national meeting of Volunteer Examiner Coordinators July 9, FCC Wireless Telecommunications Bureau chief D'wana Terr hinted at what hams can expect from the FCC. "Some things will probably be concrete proposals; other things will be discussion topics," she told the gathering. But Terry said none of the FCC's proposals should be considered "carved in stone," and she urged hams to comment constructively. "We want to do things that make sense," she said.

Terry said the changes could include action on outstanding petitions for rulemaking "to the extent that they fit into the biennial review" of Part 97. "We are trying to clear out our backlog," she said.

She encouraged hams to not just complain but to tell the Commission what will work and offer solid suggestions. "What we try to do is give it our best shot," she said. "We don't always get it right."

Terry said the FCC's proposals on changes to Part 97 would be out "sometime this year—I can't say when."

VECs said they had been hoping for more of a "heads up" on the FCC's plans for Part 97. ARRL-VEC Manager Bart Jahnke, W9JJ, suggested to Terry that the FCC offer a longer-than-normal period for amateurs to comment. Also at the session, W5YI-VEC Fred Maia, W5YI, expressed concerns that something must be done to reverse the downward trends in licensing and upgrading.

FCC officials also discussed progress to implement the Universal Licensing System (ULS). The ULS, which would move the application process into the electronic arena, is expected to come on-line by next spring.

The VECs re-elected Conference Chairman Win Guin, W2GLJ.

The ARRL Letter, 7/17/97

Amateur Radio Spectrum Protection Bill has 39 cosponsors

ARRL Legislative and Public Affairs Manager Steve Mansfield, N1MZA, reports that HR 3572, the Amateur Radio Spectrum Protection Act, now has 39 cosponsors (including the original sponsor) and several more members of Congress have indicated their intention of signing on. "Letters from ARRL members are beginning to take effect," Mansfield says.

The bill, introduced March 27 at the request of the ARRL, would protect existing Amateur Radio spectrum against reallocations to or sharing with other services unless the FCC provides "equivalent replacement spectrum" elsewhere. The bill was introduced by Rep Michael Bilirakis of Florida, a Republican, with the cosponsorship of Rep Ron Klink of Pennsylvania, a Democrat.

Cosponsors also now include Peter DeFazio and Earl Blumenauer of Oregon; George Nethercutt of Washington; Frank Pallone of New Jersey; Tom Campbell and John Doolittle of California; Patsy Mink of

Hawaii; David Hobson, Tony Hall, Steven LaTourette, Michael Oxley, and Dennis Kucinich of Ohio; Bob Clement of Tennessee; Dave Weldon of Florida; David Price of North Carolina; Robert Wise of West Virginia; Michael Crapo of Idaho; and Jay Dickey of Arkansas.

Others are Representatives Dan Burton of Indiana; Louise Slaughter, Sue Kelly, Michael McNulty and Peter King of New York; Charlie Norwood, Nathan Deal, and John Lewis of Georgia; Bud Cramer of Alabama; Christopher Shays of Connecticut; Collin Peterson of Minnesota; James Talent, Jo Ann Emerson and Ike Skelton of Missouri; Dale Kildee and James Barcia of Michigan; J.C. Watts Jr of Oklahoma; Scott Klug of Wisconsin; and Jon Christensen of Nebraska.

The bill points out Amateur Radio's basic purpose as a "voluntary, noncommercial radio service" that has "consistently and reliably" provided emergency communication during and after disasters. The measure notes that the FCC has "taken actions which have resulted in the loss of at least 107 MHz of spectrum to radio amateurs."

HR 3572 has been referred to the House Commerce Committee. An effort is under way to enlist additional cosponsors for the measure. Amateurs are encouraged to contact their Representatives and urge them to support the bill or to sign on as cosponsors. The full text of the bill is available at <http://thomas.loc.gov/cgi-bin/query/z?c105:H.R.3572>:

Mansfield is continuing to seek additional cosponsors for HR 3572 and urges individual hams and clubs to contact their representatives in Congress and encourage them to sign on.

The ARRL Letter, 6/26/98

Editor's note: It costs only a couple of bucks to call the WASHINGTON offices of federal legislators. I called Rep. Scott Klug's office to register my support. It was likely that call and just a few more that caused Klug to sign on. If ALL the active hams in Wisconsin called their respective representatives and Senators Feingold and Kohl, all 13 or so would likely sign on. A couple of bucks spent on ham radio's future is a good investment. Just call the Capitol switchboard, and your call will be routed.

- Jim Romelfanger, K9ZZ
Editor of sorts

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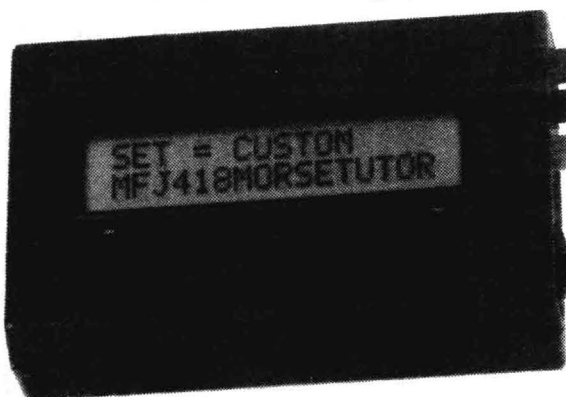
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ManCoRad Radio Club

ManCoRad is taking its summer break. They will return soon.

Balloon Flight is successful

The latest balloon-carried Amateur Radio Flight by Near Space Sciences was a success. Read about it in a story in our September issue by Bill Hommell, KA9QFJ.

No Fox Hunt Story

We had been led to believe we'd be getting a story about Euro-style fox hunting. Sorry, but it never showed up. Our apologies.



THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association
 Bob Gedemer, KA9JAC
 609 Wilson Street • Neenah, WI 54956

Andy Nemec, KB9ALN, Editor • 720 N. Broadway (Upper West) • Green Bay, WI 54303

WAPR News - August, 1998

The Dog Days of summer are here, and soon (sooner than we would like), we will see the end of summer and our focus will change to indoor activities. I hope your summer has been pleasant, and you find the time to enjoy what time there is left before the "Bitter End".

It seems that packeteers have been spending more time out-of-doors these days, as there is little news to report concerning the Wisconsin Packet Radio Network. For that reason, I have an especially long article this month that may get your "experimental blood" flowing. It is intended as mild reading if you are not a "techie", but has some technical details for those who want to dive into something unusual. I do hope you find it interesting reading.

Speaking of reading, the WAPR Web Page will be updated soon. I have just finished preparing the last of the "Using the Wisconsin Network" articles for inclusion on the Web Site, and that will make all of the series available for downloading and reading. For those of you who find the series of interest, look for it at <http://netnet.net/~ke9lz>.

On another subject, I have been experiencing what anyone with a computer dreads - a computer virus. The first question that I was asked, naturally, was "Did you get it from packet?" The answer is no. I got it from exchanging floppies with a friend. But as long as the subject came up, it seemed to be a good opportunity to talk about this a bit.

It is very difficult for most people to pick up a computer virus with packet radio. The reason is that they primarily use packet to read simple text files. To my knowledge, it is not possible to hide a virus into a text message. The file would probably have all kinds of "garbage" in it, and these kinds of files are not "executable".

Executable files are those which cause your computer to perform some function. Text files are simply read and displayed on the screen of your computer. Viruses hide in executable files, those which have file names ending in .COM and .EXE.

Most packet operators do not transfer many executable files over the air. That is because you need an additional program to allow these files to be sent out via radio. There are several programs that operate in this manner, like YAPP, UUE, and 7Plus. It seems that most packet operators would rather not bother with the additional work to pass these files on the packet network. If they did, it is possible to send a virus-infected executable program file via packet - just as it is possible to spread a virus by exchanging floppies (or by any other method).

The short answer to all of this is that you will not get a virus from packet if you only use it to send and read packet mail, or to transfer readable text files. If you get executable files (binary or program files), then it is possible to pick up a virus.

The safest way to avoid a virus is to not download any program file that you aren't ABSOLUTELY sure is safe. Beware of files sent to @WW that come from foreign countries - I have seen reports of virus-infected files sent via 7Plus encoding from various foreign countries. As a precaution, don't download anything you are not sure of, or download it onto a floppy. Once it is on the floppy, power down your system, reboot, and run a virus-check program on the download floppy.

One final note in the news - have you thought about joining or rejoining WAPR? Your support of the packet radio network is appreciated in this state, and do hope you consider joining us in supporting the network.

That's all for this month. Until next time, 73 from Andy.

Andy Nemec, KB9ALN.

Internet Reply To: kb9aln@kb9byq.ampr.org

AX.25: KB9ALN@KB9ALN.#GRB.WI.USA.NOAM

Amprnet: kb9aln@n9oly.ampr.org [44.92.20.23]

USPS: 453 Cottage Grove Avenue, Green Bay, WI. 54304

Web Pages on Packet Radio ?

by Andy Nemec, KB9ALN

A lot of hams are on the internet these days, and have become accustomed to the many conveniences and resources available there. One of the most popular internet activities for Hams and the general population is "Web Surfing". In fact, "www" has nearly become part of our language, and we see it in magazine advertisements and commercials on TV. These days, "The Web is Hot" is nearly an understatement.

And how does packet radio fit into this? after all, you can't send Web pages over packet...or can you? The answer is "Oh yes you can!", and I have done it.

As some of you may know, we in Green Bay have been able to route TCP/IP packet radio as well as the more conventional AX.25 packet radio traffic for quite some time now. Many of us have been operating TCP/IP "stations" (known as "hosts" in Internet terms) and have been having quite a good time at it. For those of you who may not know, TCP/IP is the protocol set (the method computers use to talk amongst themselves) used on the Internet. It seemed logical to a number of folks that it should be possible to send Web pages out over the packet radio network using TCP/IP. I have heard it has been done out in the eastern part of the country, so I set about to try it myself. That is the subject of this article - what was done and how it was done. For those of you who are less technically oriented, we'll look at it in general terms. For those who are more technically-minded, we'll look at it in more depth as well, with an equipment and setup summary near the end of the article.

The Basics:

Before we get all wrapped up in terminology, we should get acquainted with how the basic system of Web Page distribution works on the Internet. With this look at the general layout of the system comes an explanation of the terminology used in describing the system.

One important concept you will need to know about is the "server/client" concept. I am sure a lot of you have heard this term before, it is tossed out quite frequently these days. You probably have heard of another companion term, "distributed resources". Simply put, a "server" is a computer running a specific program that allows it to provide a service on behalf of a user or another computer. In the World Wide Web, a computer that stores and dispenses copies of web pages is known as a "Web Server". You have probably seen the TV commercial from IBM that mentions it's web servers. These are machines set up with software and large drive capacity to store and dispense web pages to whomever may want them.

Now we will talk of the other end of the system - the client. Just as lawyers have clients, the Web Server has clients, too. A client is a

computer running software designed to collect and display (or store) information provided by the server. When you connect to the internet and view web pages, your computer is the "client". The software that allows your computer to become the client is your Web Browser and the software that allows you to connect up to the internet. When you use the "server/client" system, you are said to be on a network of "distributed resources". Simply put, you are not putting "all of your eggs in one basket". It would be impossible (or at least impractical) for you to have a personal computer that is capable of storing every web page on the Internet - there is just too much data to store on your computer. Not to mention the incredible amount of network time it would take to transfer that information to your computer. In fact, it would be impossible to store all of the Web Pages that exist on one central computer. So, the "server/client" concept is really the only way to go, as it distributes resources across a wide network. In most cases it is the internet. Of course, this same concept works in radio networking.

Chances are, you have been using the "server/client" system already and may not have realized it. If you use a BBS, essentially you are using a "E-Mail server" of sorts. When you connect up to a BBS and read messages, your computer becomes the client. On the other hand, when someone connects to your TNC mailbox, your TNC becomes the "server" and the person connected to your mailbox becomes the "client". This is the example of how the concept already applies to packet radio.

In the world of the Web, we need a server to store and distribute the web pages on demand, and suitable client software to interpret and display the pages. There is no commonly available web-server and web-client software written specifically for packet radio (that I know of), but we can use other existing software to perform these functions. However, we do need a radio network capable of operating with this software.

Network Interconnection.

As most people know (or at least have heard), packet radio uses the AX.25 protocol as the standardized method that our computers use to communicate with each other. TCP/IP, Net/Rom, and other protocols can be sent via packet radio, but they must first be "wrapped-up", or "encapsulated" into an AX.25 packet. If you are unfamiliar with this concept, it is discussed in the "Using the Wisconsin Network" series, parts 10, 23, and 24 to name a few. If you have the ability to connect up to the World Wide Web, you can find these on the WAPR Web Page, <http://netnet.net/~ke9lz>.

Once we have the ability to send these TCP/IP packets, we must have the ability to carry the packets to their destination.

When all of these pieces (server, radio interface, and radio network) are put together, we have something that looks like this on the "server side" of things:

Web Server -----> Radio interface -----> Radio Net work
 Computer (nodes, etc.)

When we add the client into the picture, the "other half" looks like this:
 Radio Network -----> Radio Interface -----> Client Computer

The radio interface is one term that might be a little vague, because there are a number of actions that take place in order to couple a computer running TCP/IP to the AX.25 computer network. I mentioned earlier that we need to "wrap" (encapsulate) the TCP/IP packets in AX.25 packets, so the TNC can send them to the radio and out on the airwaves. We can use one of a couple of methods to do this:

1) We can have another computer intervene and perform this function. This computer sits in between the server and the TNC, and would accept incoming TCP/IP packets. It would then wrap them in AX.25 packets and send them out to the TNC, which is, of course, connected to the radio. The packets are then sent out via the radio. This is another example of "distributed resources". It has it's appeal for reasons that I will not go into right now, but it also has the disadvantage of requiring more hardware - 2 computers versus one - and a wire network connecting them together.

2) We could also use the server running another program to do this. The Web Server would not only serve up the pages, but would also do the encapsulation and hook to the TNC. This is a little tidier, but also requires the use of an operating system that will support multi-tasking.

WISCONSIN AMATEUR PACKET RADIO MEMBERSHIP APPLICATION

PLEASE PRINT

NAME: _____ CALL: _____ HOME PHONE: (____) _____

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

HOME BBS: _____ FREQ: _____ (Listing your home BBS is important)

Your HOME BBS should be a full service BBS, not your TNC's mailbox.

MY PACKET STATION OPERATES: _____ DAY _____ NIGHT _____ 24HRS

I OPERATE A: _____ DIGIPEATER WITH ALIAS OF: _____

_____ FULL SERVICE BBS

PRIMARY PACKETINTEREST/EXPERTISE IS: _____

_____ YES I want to receive Badger State Smoke Signals and I understand that part of my dues goes to pay this subscription. cost \$20.00

_____ NO I do not wish to receive Badger State Smoke Signals as a part of my WAPR membership. Cost \$15.00

COMPLETE and return this form with your check or money order - \$15.00 membership only or \$20.00 membership and Badger State Smoke Signals. made payable to W.A.P.R. (NOT payable to Bob Gedemer) to:

Bob Gedemer KA9JAC/WAPR
 609 Wilson St.
 Neenah, WI. 54956-3129

Specifics of Our Test Setup:

What we did to test our Web-Page server incorporated both of the concepts we talked of above. The server uses Linux as an operating system (see "Using the Wisconsin Network" - Part 40). Linux is a multi-tasking system, and is able to run the web server software as a program that runs "in the background". It listens for incoming connection requests, and accepts and process them. This server computer connects to a wired network.

The radio interface computer serves the function of a gateway to the radio network. Aside from the Web server computer, this radio interface computer provides gateway service to the radio network for 3 other computers on the "wired network". In a sense, it is a "radio interface server". It performs the wrapping of the TCP/IP packets into AX.25 packets for any computer that needs this service on the wire network. This computer runs an amateur radio TCP/IP NOS program set up for this purpose.

The radio interface computer has a TNC running on VHF at 1200 bps. The local LAN and backbone nodes are able to route the AX.25 encapsulated TCP/IP packets to the client computer.

The server-side LAN node is a 1200 bps VHF node. It is on the same node stack as the client-side LAN node, which is on UHF at 9600 bps.

The client side uses the second "unified" approach, but without the server software running. It uses client software, and it is set up to do the radio interfacing with a conventional TCP/IP NOS program. Because we are using more than one program at a time, a multi-tasking operating system is needed. Linux is used here, because it easily supports a Web Browser as well as the radio NOS program.

The radio NOS program links the Web Browser to the radio network. It runs on the same computer, and sends the AX.25 wrapped TCP/IP packets to the TNC and then the radio, where they are sent out to the radio network. Naturally, it also does the reverse so that commands can be sent to the server.

The Web Pages themselves are written in HTML, the language of the Web. They are simple text in content, with no graphics. The system operates just as usual - it supports linking to other pages and other sites. Our server side was not set up to link to other sites, but it does support this feature.

Graphics can be sent as well, but it was decided that the heavy download time needed would not be suitable for a radio path that is using 1200 bps in part of the radio link. As it was, this 1200 bps limiting factor did make itself known - those folks who are used to lightning-fast speeds will most certainly yawn while waiting for the full page to appear. However, a Web Page with mostly text content would be far more practical even at 9600 bps.

Are There Other Ways To Do This?

Linux is the best choice for a server operating system as it is born to do server work. Setting up a dos-based server would be very difficult, and probably limit it's utility. That is, assuming you could find something that can run effectively under dos.

The client side is a little more flexible, however. There are two programs that have been written that will allow Windows 3.11 and Windows 95 to operate their TCP/IP systems with a TNC. What these programs do is wrap the TCP/IP packets from your browser into AX.25 packets, and send them to your TNC through your serial port. You would need a TCP/IP address in order to use this system, but it is possible to use a specially-configured Windows computer to see web pages served over the amateur packet radio network.

Both these programs are available at the following Web Site:

<http://hambox1.cqu.edu.au>. The files also include setup instructions, and this site does have a lot of neat information on it.

Specifics for the "Techies":

The Server Side:

486 DX-33 MHz computer running Caldera OpenLinux Lite, kernel 2.0.29.
Apache Web Server v1.1.1-11.
10 Mbps ethernet wired network port.

Server Radio Interface:

386 SX-16 MHz running MS-DOS 6.22
WNOS 4 (dama slave custom version, a variant of KA9Q NOS)
10 Mbps Ethernet wired network port.
Paccomm Tiny-2 1200 bps TNC
Motorola "Moxie" VHF Radio, converted to the 2-Meter amateur band.

The Client Side:

486 DX 100 MHz computer running Red Hat 5.0 Linux
Lynx 2.4.2-4 Text-based Web Browser
"Pseudo-Slip" (Unix "pipe") connection to the radio interface program

Client Radio Interface:

JNOS v1.11b (Linux) software, running on the above computer under Linux.
"Pseudo-Slip" (Unix "pipe") connection to the Linux-operated browser
Paccomm Spirit-2 9600 bps TNC in KISS mode.
Motorola Mitrek UHF radio, converted to the 70 cm amateur band

Radio Network Nodes:

Paccomm Tiny-2 1200 bps TNC running TheNet X-1J firmware
Motorola Syntor-X VHF radio converted to the 2-meter amateur band
Paccomm Spirit-2 9600 bps TNC running TheNet X-1J firmware
Motorola Mitrek UHF radio, converted to the 70 cm amateur band

Other notes:

The "server side" may also be configured similarly to the way that our "client side" is

Yellow Thunder Amateur Radio Club



WB9FDZ (Original Club Call)
K9ODK (Robert L. Prine Memorial Call)

Raymond J. Matlosz, N9MLZ, Secretary
450 West 2nd Street • Reedsburg, WI 53959

The July 7, 1998 meeting of the Yellow Thunder Amateur radio club was called to order at 7:45 p.m. by the club treasurer Bill Klinkner, N9KXX.

The June 16, 1998 minutes were approved as published in BSSS, though the first paragraph was missing ("The June 16, 1998 meeting of YTAARC was called to order at 7:41 p.m. by the club president Steve Schulze, N9UDO").

Bill Klinkner gave the treasurer's report.

Announcements: None

OLD BUSINESS: Field day went well, though one of the member's kid did comment that they could have been killed (lightning, severe winds, rain). Media coverage by WRDB as well as the Baraboo radio stations, Baraboo Sun and Baraboo News-Republic.

Committee reports: Swapfest - set up scheduled for Friday between 6 and 9. Planning meeting at Steve's house Thursday July 30th at 7:30 p.m. One of the members asked if there could be some sort of published accounting of the expenses and income for this year's event.

NEW BUSINESS: Dave Spearing, KB9CSW volunteered to check out some places for this year's party

in December.

Buck night winner was Nathan Hill, KB9RFA who was not present thus he did not win.

Meeting adjourned at 8:30 p.m.

NEXT MEETING: Tuesday August 4, 1998 at 7:30 p.m. room 14, Baraboo Civic Center. SWAPFEST AUGUST 8 7 to noon

Sincerely, Raymond J. Matlosz, N9MLZ, Secretary

The following members were present:

Steve Schwoegler	K9WD	Wisconsin
Della		
Leonard Wagner	N9XJG	Baraboo
Dave Spearing	KB9CSW	Portage
Joe Rowland	N9PRF	Portage
Bill Klinkner	N9KXX	Sauk City
Anne Klinkner	N9PQL	Sauk City
Raymond Matlosz	N9MLZ	Reedsburg
Art Kleefisch	W9WSS	Baraboo

configured. It could also be running a NOS program such as JNOS or TNOS. This would mean only one computer would be used, and it could be set up as both the server and the radio interface computer. It was not done this way for convenience - the wired Ethernet network was already in place. As a side benefit, we are able to demonstrate the concept of distributed resources in a small network.

The same can be said of the 1200 bps "speed limit". At the present, there is no 9600 bps capability at the server site (which just happens to be my house!). The 1200 bps system was already in place, and workable as a test bed when the LAN is not being used for other purposes. This is a limited-run test, and we do not wish to congest the LAN by offering this as a full-time service until a 9600 bps (or faster) TNC is installed.

The Future:

We do plan is to offer this as a full-time service to users of the 9600 bps LAN on UHF here in Green Bay. Graphic content will be light, and other area hams will eventually be invited to have their own "Web Pages" for all to see.

There has been talk of implementing some system of Web Serving using solely the AX.25 protocol. It is possible to transfer at least text pages via AX.25. They are, after all, written in HTML, which is a text-based "programming language". So far there are no firm plans to implement AX.25 Web Serving - just ideas floating around. If it ever comes to pass, it will not be able to implement all of the features one will find with the Internet Web server implementations, but it may prove intriguing for those people with limited computer resources.

In Closing:

This was an especially fun project that I recommend to technically-minded packeteers for duplication. I also recommend a good radio network for the task, and at least 9600 bps speed. It also is especially important to consider the content and size of the web pages, and the time of day you decide to test. Other users of the packet radio network in your area will be glad you did.

I welcome your questions and comments on this. Refer to the info at the top of the page for this. If you do decide to undertake this test, good luck!

Andy Nemec, KB9ALN.

Internet Reply To: kb9aln@kb9byq.ampr.org

AX.25: KB9ALN@KB9ALN.#GRB.WI.USA.NOAM

Amprnet: kb9aln@n9oly.ampr.org [44.92.20.23]

USPS: 453 Cottage Grove Avenue, Green Bay, WI. 54304



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1912 Russett Ct., Apt. 7 • Appleton WI 54914

(920) 993-0485

EXAM INFO: Larry Siebers, KD9IA • (920) 759-1167

• HTTP://W9ZLAMPR.ORG

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and Computer Swapfest

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For more information, call:

Glenn, AA9MT: 920-684-7096

Red, N9GHE: 920-684-9097

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E-MAIL: jfw9jn@tzn.net

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Advance Tickets \$ 5.00 at the door \$ 6.00

Tables \$ 10.00 - Tailgate \$ 5.00

S.A.S.E. to: ECARC

P.O. Box 1867 Eau Claire, WI 54702-1867

<http://www.ecarc.org>

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Intersection of Highway 60 and County I

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Swapfest sponsored by the Ozaukee Radio Club

W58 N985 Essex Drive, Cedarburg, WI 53012-1439

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Bill Klinkner, N9KXX
(608) 643-6908/843-6453

<http://www.thelorax.com/~sschulze/hamfest.htm>

Red Cedar Repeater Association, Inc.

AUCTION

February 23, 1999 • 7:00 p.m.

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CONTACT:

Steve Hart, KA9OMC
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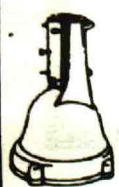
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